# **3M**

## 3M-Matic<sup>™</sup>

### **Instructions and Parts List**

800af-s

Type 10500

**Stainless Steel** 

Adjustable

**Case Sealer** 

with

# **AccuGlide**<sup>™</sup>**SST Taping Heads**

Serial No. \_\_\_\_\_\_For reference, record machine serial number here.



# Important Safety Information

BEFORE INSTALLING OR OPERATING THIS EQUIPMENT

Read, understand, and follow all safety and operating instructions.

### **Spare Parts**

It is recommended you immediately order the spare parts listed in the "Spare Parts/Service Information" section. These parts are expected to wear through normal use, and should be kept on hand to minimize production delays.



### To Our Customers:

This is the 3M-Matic™/AccuGlide™/Scotch® equipment you ordered. It has been set up and tested in the factory with Scotch® tapes. If technical assistance or replacement parts are needed, call or fax the appropriate number listed below.

Included with each machine is an Instructions and Parts List manual.

### **Technical Assistance:**

3M-Matic<sup>™</sup> Helpline - 1-800/328 1390. Please provide the customer support coordinator with the machine number, machine type/model and serial number. If you have a technical question that does not require an immediate response, you may Fax it to 651-736-7282.

### Replacement Parts and Additional Manuals

Order parts by part number, part description and quantity required. Also, when ordering parts and/or additional manuals, include machine name, number and type. A parts order form is provided at the back of this manual.

3M/Tape Dispenser Parts
241 Venture Drive 1-800/344 9883
Amery, WI 54001-1325 FAX#715/268 8153

Minimum billing on parts orders will be \$25.00. Replacement part prices available on request. \$10.00 restocking charge per invoice on returned parts.

Note: Outside the U.S., contact the local 3M subsidiary for parts ordering information.



### To Our Customers:

This is the 3M-Matic<sup>™</sup>/AccuGlide<sup>™</sup>/Scotch<sup>®</sup> equipment you ordered. It has been set up and tested in the factory with Scotch<sup>®</sup> tapes. If any problems occur when operating this equipment and you desire a service call or phone consultation, call, write or fax the appropriate number listed below.

Included with each machine is an Instructions and Parts List manual.

Order parts by part number, part description and quantity required. Also, when ordering parts and/or additional manuals, include machine name, number and type.



**3M Industrial Adhesives and Tapes** 

### **Instruction Manual**

### 800af-s Stainless Steel Adjustable Case Sealer Type 10500

### This instruction manual is divided into two sections as follows:

| Section I  | Includes all information related to installation, operation and parts for the case sealer. |
|------------|--|
| Section II | Includes specific information regarding the AccuGlide™ SST 2 Inch Taping Heads.            |

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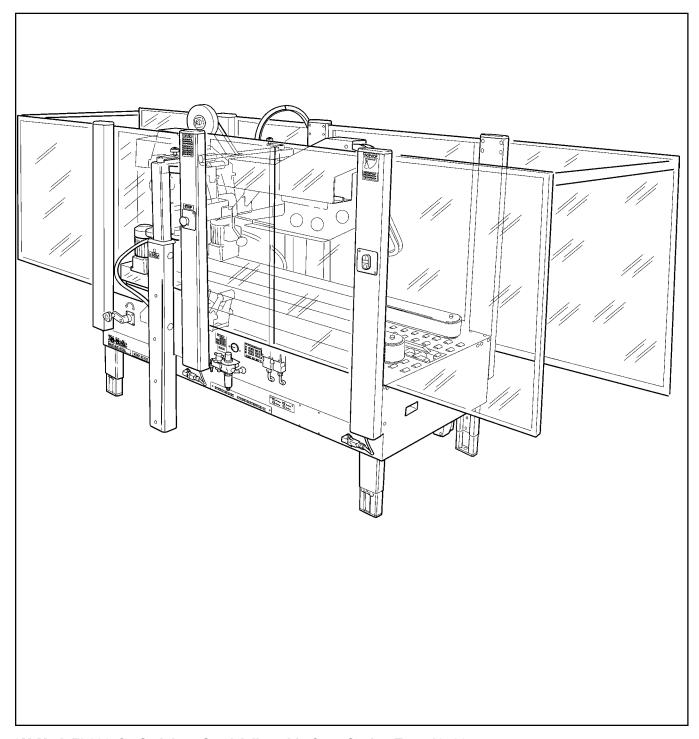
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# Section II - AccuGlide™ SST 2 Inch Taping Heads (See Section II for Table of Contents)

### **Intended Use**

The intended use of the **3M-Matic**<sup>™</sup> **800af-s Stainless Steel Adjustable Case Sealer** with **AccuGlide SST Taping Heads** is to automatically seal the top and bottom center seams of regular slotted containers without the need for an operator. It will accept filled regular slotted containers from an existing conveyor, fold the top flaps and apply a "C" clip of **Scotch**® pressure-sensitive film box sealing tape to the top and bottom center seams of the box. An integral gate provides the proper spacing of incoming boxes. Infeed conveyor speed must not exceed 0.3 m/s [60 F.P.M.] maximum. The machine has been designed and tested for use with **Scotch**® pressure-sensitive film box sealing tape.



3M-Matic™ 800af-s Stainless Steel Adjustable Case Sealer, Type 10500

Equipment Warranty and Limited Remedy: THE FOLLOWING WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, A CUSTOM OR USAGE OF TRADE:

3M sells its 3M-Matic<sup>™</sup> 800af-s Type 10500 with the following warranties:

- 1. The drive belts and the taping head knives, springs and rollers will be free from all defects for ninety (90) days after delivery.
- 2. All other taping head parts will be free from all defects for three (3) years after delivery.
- 3. All other parts will be free from all defects for two (2) years after delivery.

If any part is proved to be defective within its warranty period, then the exclusive remedy and 3M's and seller's sole obligation shall be, at 3M's option, to repair or replace the part, provided the defective part is returned immediately to 3M's factory or an authorized service station designated by 3M. A part will be presumed to have become defective after its warranty period unless the part is received or 3M is notified of the problem no later than five (5) calendar days after the warranty period. If 3M is unable to repair or replace the part within a reasonable time, then 3M at its option, will replace the equipment or refund the purchase price. 3M shall have no obligation to provide or pay for the labor required to install the repaired or replacement part. 3M shall have no obligation to repair or replace (1) those parts failing due to operator misuse, carelessness, or due to any accidental cause other than equipment failure, or (2) parts failing due to non-lubrication, inadequate cleaning, improper operating environment, improper utilities or operator error.

**Limitation of Liability:** 3M and seller shall not be liable for direct, indirect, special, incidental or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability or any other legal theory.

The foregoing Equipment Warranty and Limited Remedy and Limitation of Liability may be changed only by a written agreement signed by authorized officers of 3M and seller.

### Contents - 800af-s Stainless Steel Adjustable Case Sealer

- (1) 800af-s Stainless Steel Adjustable Case Sealer, Type 10500
- (1) Tool/Spare Parts Kit
- (1) Instruction and Parts Manual

### **Important Safeguards**

This safety alert symbol identifies important messages in this manual. **READ AND UNDERSTAND THEM BEFORE INSTALLING OR OPERATING THIS** EQUIPMENT.

### **Explanation of Signal Word Consequences**



**WARNING:** Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.



**CAUTION:** Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and/or property damage.

### WARNING

- To reduce the risk associated with mechanical and electrical hazards:
- Read, understand and follow all safety and operating instructions before operating or servicing the case sealer
- Allow only properly trained and qualified personnel to operate and/or service this equipment
- Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads
- To reduce the risk associated with pinch, entanglement and impact hazards:
- Do not leave the machine running while unattended
- Turn the machine off while not in use
- Never attempt to work on any part of the machine, load tape, or remove jammed boxes from the machine while the machine is running
- Keep away from moving belts and pneumatically controlled kicker
- To reduce the risk associated with hazadous voltage:
- Position electrical cord away from foot and/or vehicle traffic



### To reduce the risk associated with impact hazards:

- Always use appropriate supporting means when working under the upper drive assembly
- Turn air supply off and be sure flap kicker is down before servicing
- Never operate this equipment with safety interlocks or guarding removed
- To reduce the risk associated with sharp blade hazards:
- Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp
- To reduce the risk associated with fire and explosion hazards:
- Do not operate this equipment in potentially flammable/explosive environments
- To reduce the risk associated with muscle strain:
- Use the appropriate rigging and material handling equipment when lifting or repositioning this equipment
- Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift
- Use proper body mechanics when removing or clearing jammed boxes from the machine



### CAUTION

- To reduce the risk associated with pinch and entanglement hazards:
- Keep hands clear of the upper head support assembly as boxes are transported through the machine
- Always feed boxes into the machine by pushing only from the end of the box
- Keep hands, hair, loose clothing, and jewelry away from moving belts and taping heads
- To reduce the risk associated with pinch hazards:
- Keep away from the pneumatically controlled upper drive assembly and box centering guides when air and electric supplies are on

### Important Safeguards (Continued)

This safety alert symbol identifies important messages in this manual. READ AND UNDERSTAND THEM BEFORE INSTALLING OR OPERATING THIS EQUIPMENT.

**Important –** In the event the following safety labels are damaged or destroyed, **they must be replaced to ensure operator safety**. Replacement part numbers for individual labels are shown in Figures 1-1, or a label kit, part number 78-8133-9619-5, is available that includes all labels used on the machine.

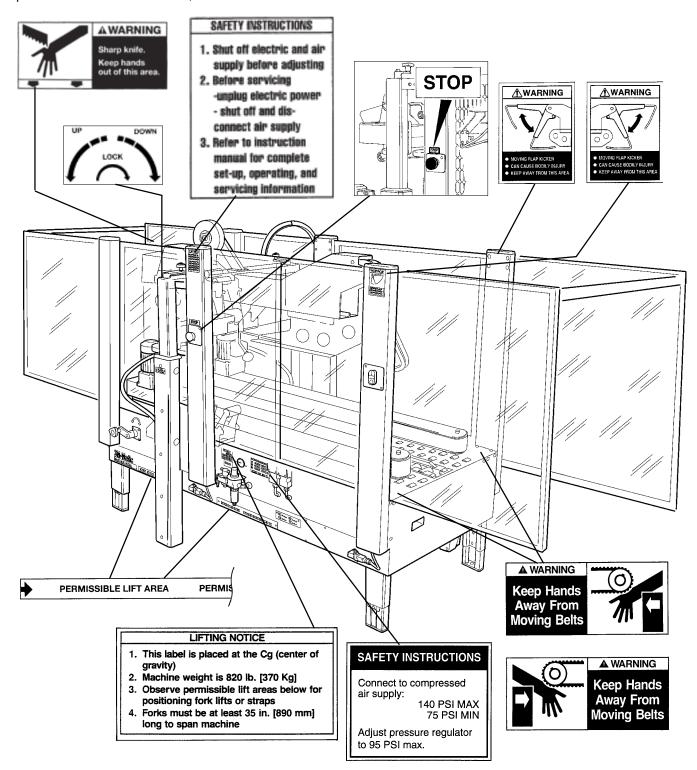
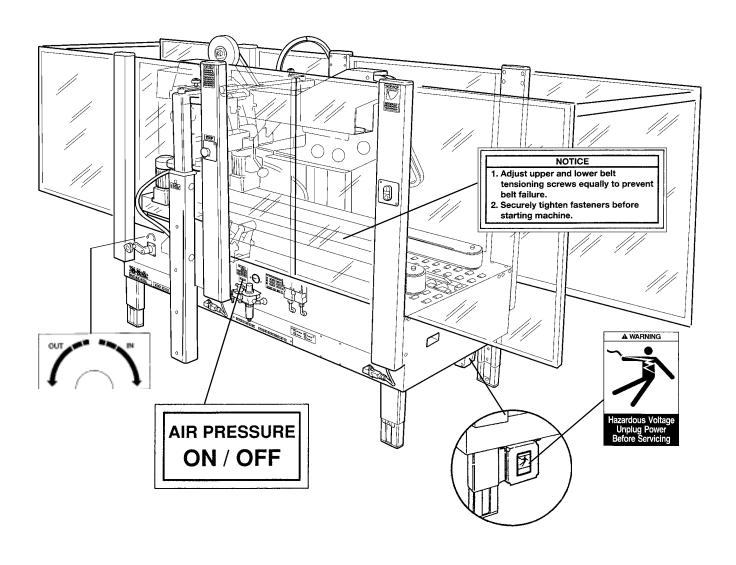
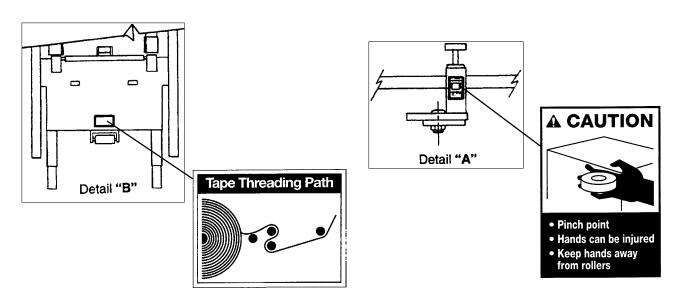


Figure 1-1 - Replacement Labels/3M Part Numbers





### **Important Safeguards** (Continued)

### **WARNING**

- To reduce the risk associated with mechanical and electrical hazards:
  - Allow only properly trained and qualified personnel to operate and/or service this equipment

### **Operator Skill Level Descriptions**

### Skill 1 - Machine Operator

This operator is trained to use the machine with the machine controls, to feed cases into the machine, make adjustments for different case sizes, to change the tape and to start, stop and restart production.

**Important –** the factory manager must ensure that the operator has been properly trained on all the machine functions before starting work.

#### Skill 2 - Mechanical Maintenance Technician

This operator is trained to use the machine as the MACHINE OPERATOR and in addition is trained to work with the safety protection disconnected, to check and adjust mechanical parts, to carry out maintenance operations and repair the machine. He is not qualified to work on live electrical components.

#### Skill 2a - Electrical Maintenance Technician

This operator is trained to use the machine as the MACHINE OPERATOR and in addition is trained to work with the safety protection disconnected, to make adjustments, to carry out maintenance operations and repair the electrical components of the machine. He is qualified to work on live electrical panels, connector blocks, control equipment, etc.

**Skill 3 - Specialist From the Manufacturer** Skilled operator sent by the manufacturer or its agent to perform complex repairs or modifications, when agreed with the customer.

### Operator's Skill Levels Required to Perform the Main Operations on Machine

| Operation                               | State of the Machine                      | Operator's<br>Skill | Number of<br>Operators |
|---|---|---------------------|------------------------|
| Installation and set up of the machine. | Running with safety protections disabled. | 2 and 2a            | 2                      |
| Adjustment of the box size.             | Stopped by pressing the STOP button.      | 1                   | 1                      |
| Tape replacement.                       | Stopped by pressing the STOP button.      | 1                   | 1                      |
| Replacement of blades.                  | Electric power disconnected.              | 2                   | 1                      |
| Replacement of drive belts.             | Electric power disconnected.              | 2                   | 1                      |
| Ordinary maintenance.                   | Electric power disconnected.              | 2                   | 1                      |
| Extraordinary maintenance (mechanical). | Running with safety protections disabled. | 3                   | 1                      |
| Extraordinary maintenance (electrical). | Running with safety protections disabled. | 2a                  | 1                      |

### **Specifications**

#### 1. Power Requirements:

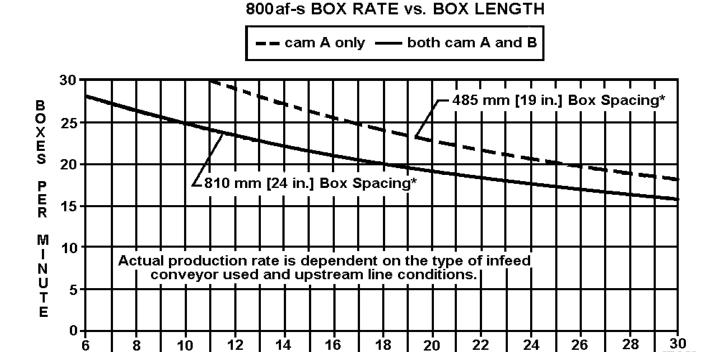
Electrical – 115 VAC, 60 Hz, 3.8 Amp (440 watts)

Pneumatic – 6.5 bar gauge pressure [95 PSIG], 2.5 SCFM 75 liter/minute @ 21° C., 1.01 bar maximum at maximum cycle rate. A pressure regulator/filter is included.

The machine is equipped with two 1/6 HP gearmotors and comes with an 2.4 m [8 foot] standard neoprene covered power cord and a grounded plug. Contact your 3M Representative for power requirements not listed above.

### 2. Operating Rate:

[152]



\*Approximate, dependent on infeed conditions

Note - Machine is shipped with both cams (A and B) installed. To obtain production rate shown with dotted line (cam A only), cam B must be removed. See "Adjustments - Gate Operation".

17 [178] [229] [279] [330] [381] [432] [483] [533] [584] [635] [686] [737] **BOX LENGTH - Inches [Millimeters]** 

15

[203] [254] [305] [356] [406] [457] [508] [559] [610] [660] [711] [762]

19

21

23

### **Specifications** (Continued)

### 3. Operating Conditions:

Use in a relatively clean environments at 5° to 40° C [40° to 105° F] with clean, dry boxes.

Important - Machine should not be washed down.



- To reduce the risk associated with fire and explosion hazards:
  - Do not operate this equipment in potentially flammable/explosive environments

### 4. Tape:

**Scotch®** pressure-sensitive film box sealing tapes.

#### 5. Tape Width:

36 mm [1-1/2 inch] minimum to 48 mm [2 inch] maximum

#### 6. Tape Roll Diameter:

Up to 405 mm [16 inch] maximum on a 76.2 mm [3 inch] diameter core. (Accommodates all system roll lengths of **Scotch**® film tapes.)

### 7. Tape Application Leg Length - Standard:

70 mm ±6 mm [2-3/4 inch ±1/4 inch]

#### 8. Box Board:

Style – regular slotted containers – RSC 125 to 275 P.S.I. bursting test, single wall B or C flute.

### **Specifications** (Continued)

#### 9. Box Weight and Size Capacities:

A. Box Weight, filled – contents must support flaps.

Minimum – weight must be sufficient to hold carton on the conveyor bed with bottom flaps fully closed or 1.4 kg [3 lb.] minimum.

Maximum - 40 kg [85 lb.]

B. Box Size:

Minimum: Length – 150 mm [6 inches]

Maximum: Length – 760 mm [30 inches]

Width – 120 mm [4-3/4 inches] Height – 120 mm [4-3/4 inches]\* Width – 545 mm [21-1/2 inches] Height – 620 mm [24-1/2 inches]\*\*

- \* Boxes lower than 165 mm [6-1/2 inches] and wider than 320 mm [12-1/2 inches] require removal of compression rollers.
- \*\* With columns adjusted to upper position, maximum box height increase to 725 mm [28-1/2 inches] and minimum box height increases to 225 mm [8-3/4 inches]. See "Special Set-Up Procedure Outer Column Re-Positioning".

**Note** – The case sealer is designed to accommodate most boxes complying with the 1976 FBA and PMMI\*\*\* voluntary standard "Tolerances for Top Opening" regular slotted containers (RSC).

Two of the requirements of the standard are the following:

- 1. The box length is not more than twice the box width.
- 2. The box length is not more than four times the box depth.

In addition, the box score lines must be sufficient to facilitate automatic flap folding. Certain environmental conditions, such as high humidity, can be detrimental to automatic flap folding.

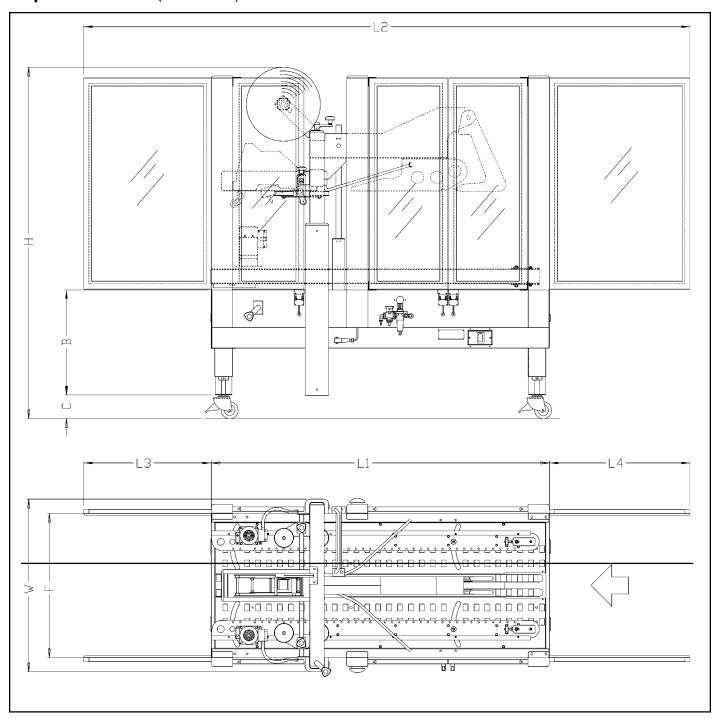
\*\*\*Fibre Box Association, Packaging Machinery Manufacturer's Association

### DETERMINE THE BOX LIMITATIONS BY COMPLETING THIS FORMULA:

BOX LENGTH IN DIRECTION OF SEAL MUST BE GREATER THAN .6
BOX HEIGHT

If any of the above criteria are not met boxes should be test run to assure proper machine performance.

### Specifications (Continued)



Dimensions are listed on the following page.

#### 10. Machine Dimensions:

|                                  | W              | L1              | L2                       | Н                        | В                      | F             |
|----------------------------------|----------------|-----------------|--------------------------|--------------------------|------------------------|---------------|
| <b>Minimum</b><br>mm<br>[inches] | 985<br>[38.75] | 1920<br>[75.63] | 3445<br>[135.63]         | 1575 - 2185<br>[62 - 86] | 610 - 890<br>[24 - 35] | 825<br>[32.5] |
| Maximum<br>mm<br>[inches]        | 985<br>[38.75] | 1920<br>[75.63] | 3445<br>[135.63]         | 1575 - 2185<br>[62 - 86] | 610 - 890<br>[24 - 35] | 825<br>[32.5] |
|                                  | L3             | L4              | С                        |                          |                        |               |
| Minimum<br>mm<br>[inches]        | 725<br>[28.5   | 800<br>[31.5]   | 135 (optional)<br>[5.25] |                          |                        |               |
| Maximum<br>mm<br>[inches]        | 725<br>[28.5]  | 800<br>[31.5]   | 135 (optional)<br>[5.25] |                          |                        |               |

Weight – 410 kg [900 lbs.] crated (approximate) 370 kg [820 lbs.] uncrated (approximate)

### 11. Set-Up Recommendations:

- Machine must be level.
- Customer supplied infeed and exit conveyors (if used) should provide straight and level box entry and exit.
- Exit conveyors (powered or gravity) must convey sealed boxes away from machine.

### **Installation and Set-Up**

#### **Receiving And Handling**

After the machine has been uncrated, examine the case sealer for damage that might have occurred during transit. **If damage is evident, file a damage claim immediately** with the transportation company and also notify your 3M Representative.

### **Machine Set-Up**

It is recommended that the case sealer be set-up and operated with product before placing it in the production line. This approach will allow your thorough review and familiarization with the 800af-s before subjecting it and operating personnel to a production situation where time for set-up, adjustments, and operator training usually becomes limited.

The following instructions are presented in the order recommended for setting up and installing the case sealer. Following them step by step will result in an installation in your production line that best utilizes the many features built into the case sealer. Refer to Figure 3-1 and 3-2 to identify the various components and controls of the machine.

For future reference, record machine serial number on front cover of this instruction manual in the space provided.

#### IMPORTANT - Read "Warnings" before attempting to set up the case sealer for operation.

- 1. Follow "Unpacking Instructions" label attached to corrugated packing cover.
- 2. Use appropriate material handling equipment to remove the machine from the pallet and move it into position.

Whenever the machine is lifted with a fork truck, insure that the forks span completely across the machine frame and do not contact any wiring or mechanism under the machine frame. In some cases the lower taping head may need to be removed to avoid damage.



- To reduce the risk associated with muscle strain:
  - Use the appropriate rigging and material handling equipment when lifting or repositioning this equipment
- 2. Remove and discard cable ties on upper head assembly.
- 3. Install the crank handle on the top of the left column, as shown in Figure 2-1A.
- 4. Install upper tape drum bracket on the top cross bar, as shown in Figure 2-1B.
- 5. Install the two infeed end guards. Attach the guards to the infeed end vertical masts, as shown in Figure 2-1C.
- 6. Raise upper head assembly (turn crank handle counterclockwise). Install the machine stops (from parts bag). Mount these stops as shown in Figure 2-1D using lowest hole position on brackets.
- 7. The lower tape drum bracket assembly is mounted on the lower head in the standard position. Ensure that the bracket assembly is mounted straight down, as shown in Figure 2-2A. The tape drum bracket assembly can be pivoted to provide clearance or for retrofit in certain cases.

Lower outboard tape roll mounting (alternate position) -

- a. Remove lower taping head from machine.
- b. Remove existing tape drum bracket from taping head and replace with bracket/roller assembly (shipped loose). Figure 2-2B. Replace taping head in machine.
- c. Install tape drum bracket (removed from taping head) on exit end of machine lower frame as shown in Figure 2-2B.

### Installation and Set-Up (Continued)

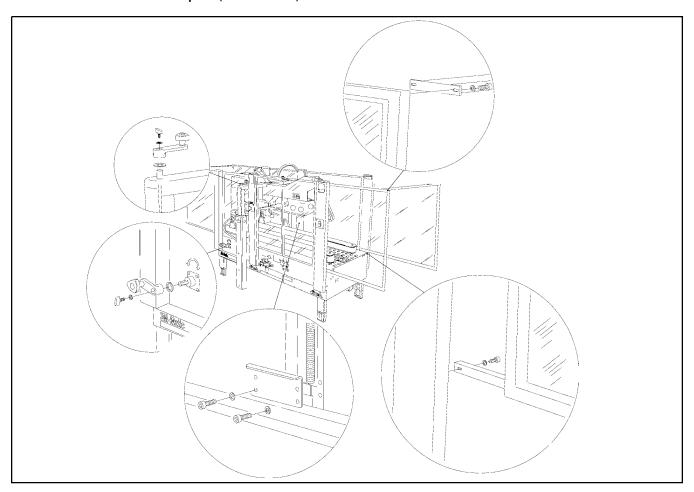


Figure 2-1 – Installation and Set-Up

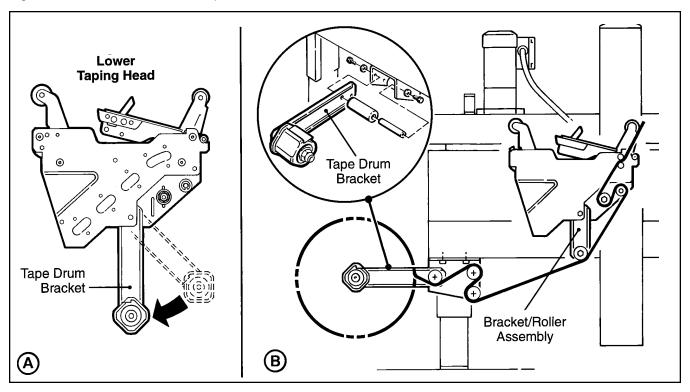


Figure 2-2 – Lower Tape Drum Bracket Position

### **Installation and Set-Up** (Continued)

- 8. Install case sealer in production line. When installing the case sealer, be sure to observe the following guidelines.
  - a. Case sealer must be installed level it is not designed to convey boxes uphill.
  - b. Infeed conveyor must convey boxes to case sealer at a speed not to exceed 0.30 m/s [60 f/m].
  - Precautions must be taken to prevent excessive box pressure against the case sealer infeed gate.
     This will help to prevent damage to the boxes and ensure proper performance.
  - d. Infeed and exit conveyors must provide straight entrance and exit of boxes to/from case sealer and exit conveyor must positively convey boxes away from machine.
  - e. Refer to Figure 2-3 for suggested conveyor types that can be used with the case sealer.

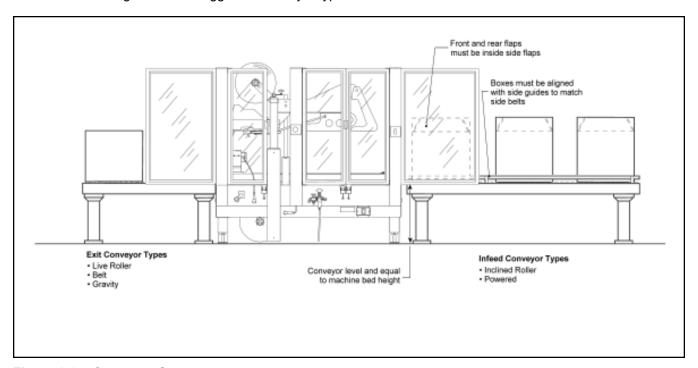


Figure 2-3 - Conveyor Systems

 Adjust case sealer bed height. The adjustable legs provide different machine bed heights from 610 mm [24 inches] minimum to 890 mm [35 inches] maximum.

Refer to Figure 2-4 and set the machine bed height as follows:

- Block up the machine frame to allow adequate leg adjustment.
- b. Loosen, but do not remove, two M8 x 1.25 mm socket head screws in one leg (use M6 hex key wrench). Adjust the leg length for the desired machine bed height. Retighten the two screws to secure the leg. Adjust all four legs equally.
- Tape width the taping heads have been preset to accommodate 72 mm [3 inch] wide tape rolls. To apply narrower width tapes, refer to Section II, "Adjustments Tape Web Alignment".

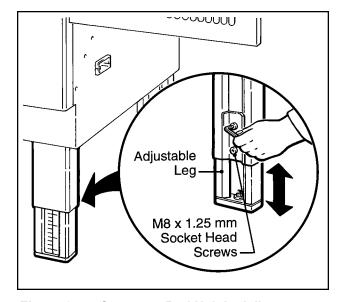


Figure 2-4 - Conveyor Bed Height Adjustment

### **Installation and Set-Up** (Continued)

- 11. Box size capacity (height) at its factory setting, the case sealer handles box sizes up to 620 mm [24-1/2 inches] maximum height. If larger capacity is needed, the machine can be adjusted to accommodate up to 725 mm [28-1/2 inches] high boxes. Refer to "Special Set-Up Procedure Outer Column Re-Positioning", for set-up information.
- Drive Belt Height drive belt assemblies can be raised 50 mm [2 inches] to provide better conveying of tall boxes. Refer to "Special Set-Up Procedure – Changing Drive Belt Height".

depressed and that all packaging materials and tools are removed from the machine. **Do not plug electrical cord into outlet until ready to run machine.** 

**Note** – Machines outside the U.S. may be equipped with 220/240 Volt, 50 Hz systems, or other electrical requirements compatible with local practice.

13. Pneumatic connection.



#### To reduce the risk associated with mechanical and electrical hazards:

 Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

The case sealer requires a 6.5 bar gauge pressure [95 PSIG] 75 liter/min @21°C, 1.01 bar [2.5 SCFM] compressed air supply. As shown in Figure 2-5 an on/off valve, pressure regulator, and filter are provided to service the air supply.

The main air supply line should be connected to the on/off valve by means of the barbed fitting and hose clamp provided on the outer side of the on/off valve as shown in Figure 2-5. The customer supplied air hose (5/16 inch [8 mm] ID) should be slipped over the barbed fitting and clamped tightly in place.

If another type of connector is desired, the fitting can be removed and replaced with the desired 1/4-18 NPT threaded connector.

### Always turn the valve "Off" when air supply line is being connected or disconnected.

14. Electrical connection and controls – the electrical control box shown in Figure 3-1, contains the "On/Off" switch with pre-set breaker and can be located on either side of the machine frame for operator convenience. A standard three conductor power cord with plug is provided at the back of the electrical control box for 115 Volt, 60 Hz, 3.8 Amp electrical service. The receptacle providing this service shall be properly grounded. Before the power cord is plugged into 115 Volt, 60 Hz outlet, make sure red "Off" button is

#### **Initial Start-Up of Case Sealer**

After completing the "Set-Up" procedure, continue through ""Operation", to be sure case sealer is properly adjusted to run product.

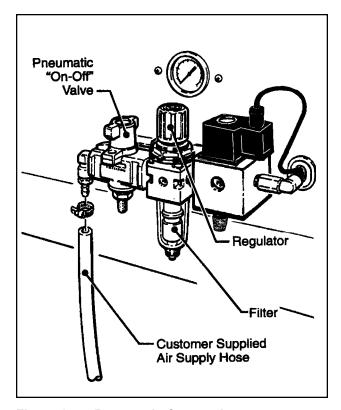


Figure 2-5 – Pneumatic Connection

### Operation

### **MARNING**

To reduce the risk associated with mechanical and electrical hazards:
 Read, understand and follow all safety and operating instructions before operating or servicing the case sealer

Refer to Figure 3-1 and 3-2 to acquaint yourself with the various components and controls of the 800af case sealer. Also see Figures 3-1 and 3-2 in Section II for taping head components.

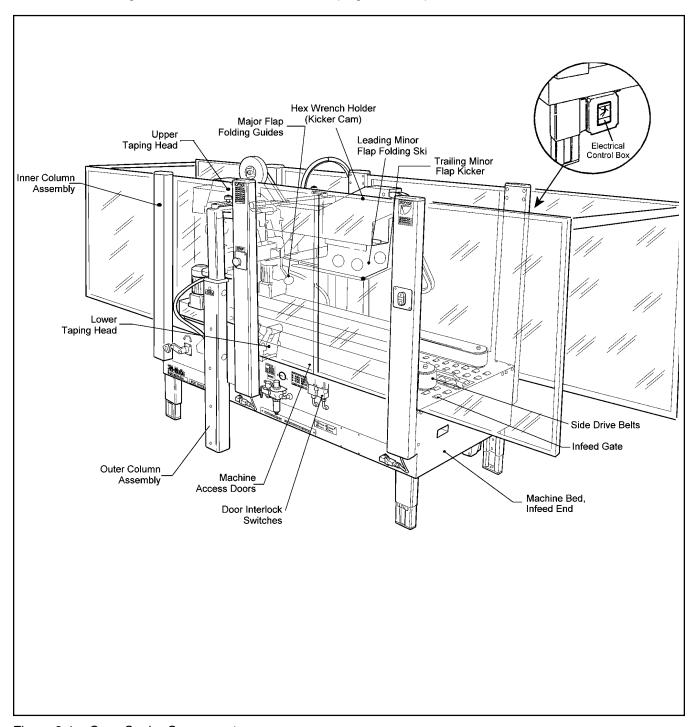


Figure 3-1 – Case Sealer Components

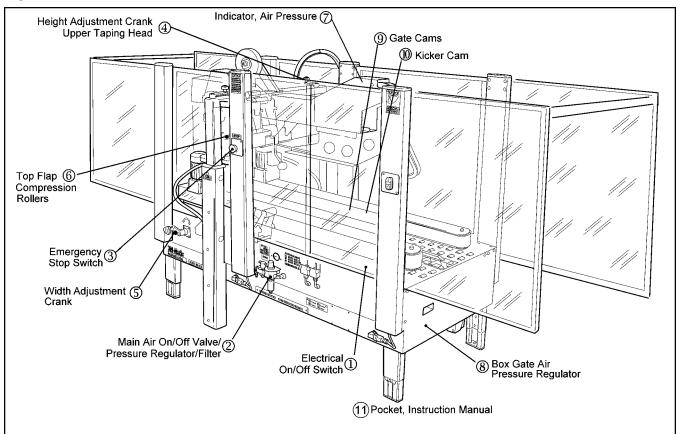


Figure 3-2 - Controls, Valves and Switches

### 1 Electrical "On/Off" Switch

The box drive belts are turned on and off (off button is red) with the electrical switch on the side of the machine guard at the infeed end.



### WARNING

- To reduce the risk associated with mechanical and electrical hazards:
  - Allow only properly trained and qualified personnel to operate and/or service this equipment
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

Note – The case sealer has a circuit breaker located in the electrical enclosure on the lower right side of the machine frame. If circuit becomes overloaded and circuit breaker trips, unplug the machine electrical cord and determine cause of overload. After two minutes, remove the electrical control box cover and reset the circuit breaker by pressing the "Reset" button and then the "Start" button on the circuit breaker. Replace the control box cover, plug machine electrical cord into outlet and restart machine by pressing green "On" button.

### 2 Main Air "On/Off" Valve/Pressure Regulator/Filter – Figure 3-3

This set of pneumatic components controls, regulates and filters plant air supply to the two separate control circuits of the case sealer.

"On/Off" Valve - "On" turn to "SUP" - "Off" turn to "EXH".

**Note –** Turning air supply "Off" automatically bleeds air pressure from the case sealer air circuits.



### WARNING

- To reduce the risk associated with mechanical and electrical hazards:
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

**Note** – The air valve has provisions for lockout/tagout according to plant regulations.

**Pressure Regulator** regulates main air pressure to the machine to adjust pressure, pull knob up and turn – push down to lock setting.

**Filter** removes dirt and moisture from plant air before it enters the case sealer pneumatic circuits. If water collects in bottom of bowl, lift up on the valve on the bottom of bowl to drain.

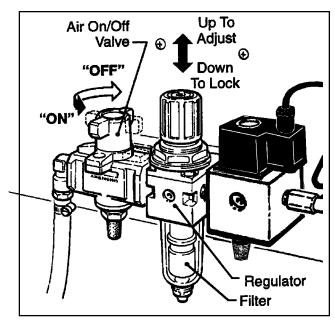


Figure 3-3 – "On/Off" Valve/Regulator/Filter

(3) Emergency "Stop" Switch

The two emergency "Stop" switches are mounted for operator convenience, on both sides of the case sealer. Pushing either of these switches will stop the drive motors/belts and exhaust air from the flap kicker.

To restart machine, rotate emergency stop switch (release switch latch) and then restart machine by pressing green (On) button on side guard.

4 Height Adjustment Crank, Upper Taping Head

Raises and lowers upper taping head/flap folders to accommodate box height.

- (5) Width Adjustment Crank
  Adjusts distance between side drive belts to accommodate box width.
- (6) Top Flap Compression Rollers
  Rollers adjust to properly maintain box width/
  top flap center seam for tape seal.
- 7 Indicator, Air Pressure
  The optical warning indicator, located on the upper flap folder frame, indicates "Red" when compressed air circuit is on.
- 8 Box Gate Air Pressure Regulator
  Adjusts lifting force of the box gate depending on the weight of boxes being sealed.

- 9 Gate Cams Figure 3-4
  The gate cams (A) (B) control the rate of box entry into the case sealer. Depending on box size, gate cams can be adjusted to increase production rate. See "Adjustments Gate Operation".
- (10) Kicker Cam Figure 3-4
  The minor flap folder, controlled by the kicker cam (C), closes the trailing minor flap on the box. The kicker cam must be adjusted according to the length of the box being sealed. See "Operation" Figure 3-8.
- A pocket, Instruction Manual
  A pocket is provided inside the right door for storage of the machine instruction manual.
  Keep the manual in this pocket for the convenience of machine operators.

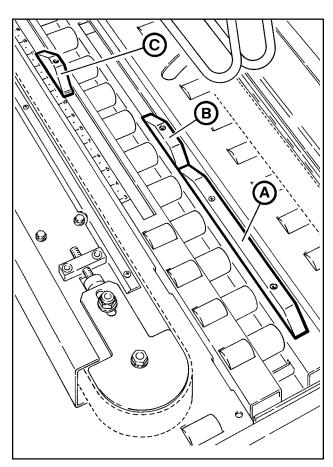


Figure 3-4 - Gate/Kicker Cams

### **WARNING**

#### • To reduce the risk associated with mechanical and electrical hazards:

 Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

### • To reduce the risk associated with impact hazards:

- Turn air supply off and be sure flap kicker is down before servicing
- Never operate this equipment with safety interlocks or guarding removed

### • To reduce the risk associated with sharp blade hazards:

 Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp

### • To reduce the risk associated with pinch and entanglement hazards:

- Do not leave the machine running while unattended
- Never attempt to work on any part of the machine, load tape, or remove jammed boxes from the machine while the machine is running
- Keep hands, hair, loose clothing, and jewelry away from moving belts, taping heads, and flap kicker

### Tape Loading/Threading - Upper Taping Head

See Section II

### Tape Loading/Threading – Lower Taping Head With Tape Drum On Taping Head

See Section II

Tape Loading/Threading – Lower Taping Head With Alternate Outboard Tape Drum



- To reduce the risk associated with muscle strain:
  - Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift

- 1. Raise upper taping head high enough to allow clearance for removing lower taping head.
- Remove lower taping head from machine bed and install threading needle as explained in Section II.
- 3. Replace taping head back into machine.
- 4. Place tape roll on outboard tape drum with adhesive side down on lead end of tape. (Seat tape roll fully against back flange of tape drum.) Thread tape through outboard tape rollers as shown in Figure 3-5 and adhere tape lead end to lower end of threading needle.
- 5. Complete tape threading as explained in Section II.

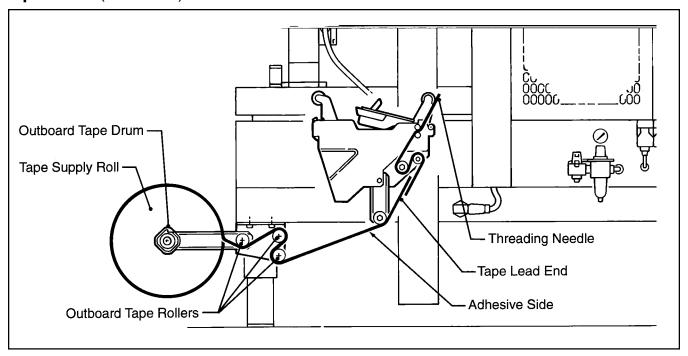


Figure 3-5 – Tape Threading With Alternate Outboard Tape Drum

### **Box Size Set-Up**

### Figure 3-6

Open the side drive belts and raise the upper head assembly to accommodate the desired box width and height.

Move the compression rolls as wide as possible.

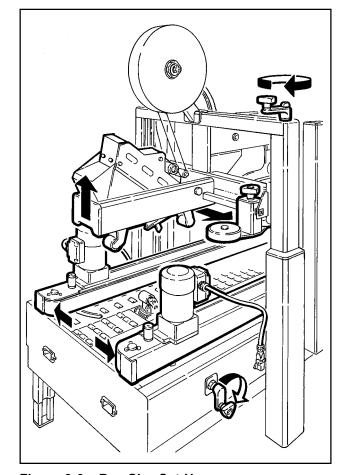


Figure 3-6 – Box Size Set-Up

### **WARNING**

- To reduce the risk associated with mechanical and electrical hazards:
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

Figure 3-7

Place a product filled box 55 to 65 mm [2-1/4 to 2-1/2 inches] into the exit end of the machine with the top flaps folded as shown.

Crank the upper head down until is just contacts the top of the box.

Crank the side drive belts in until the belts firmly grip the box.



Set Kicker cam relative to length of box being sealed. Measure the distance "X" as shown and set the cam to the same dimension measured on the box. (This dimension provides a good starting point for setting the kicker cam.)

**Note:** 5 mm hex key wrench is supplied with machine and should be kept in wrench holder on side of upper frame. See Figure 3-1.

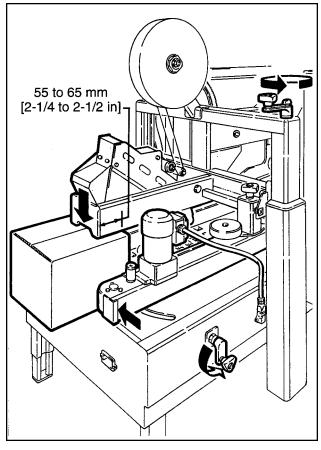


Figure 3-7 - Box Size Set-Up

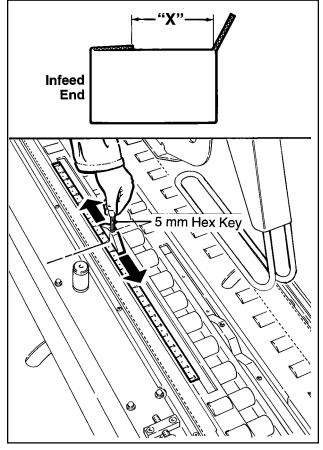


Figure 3-8 - Box Size Set-Up

Figure 3-9



### WARNING

- To reduce the risk associated with pinch, entanglement, and impact hazards:
  - Keep away from moving belts and pneumatically controlled kicker

Place box at infeed end of machine and push into machine until it is taken away by drive belts.



### CAUTION

- To reduce the risk associated with pinch, entanglement, and impact hazards:
  - Keep hands clear of the upper head support assembly as boxes are transported through the machine
  - Keep hands, hair, loose clothing, and jewelry away from moving belts and taping heads



### **WARNING**

- To reduce the risk associated with mechanical and electrical hazards:
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

Figure 3-10

Adjust compression rollers. Run box through machine and stop when adjacent to compression rollers. Move compression rollers in to press box top flaps firmly together. Restart machine to exit box.



### CAUTION

- To reduce the risk associated with pinch hazards:
  - Keep hands, hair, loose clothing, and jewelry away from box compression rollers when box is passing through machine

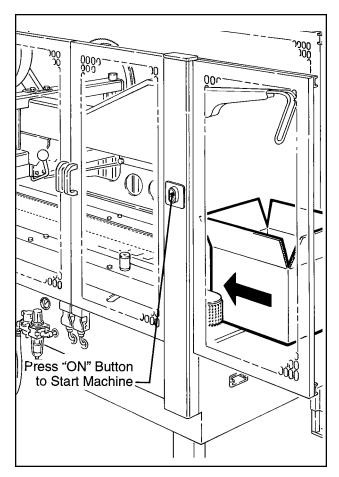


Figure 3-9 - Box Size Set-Up

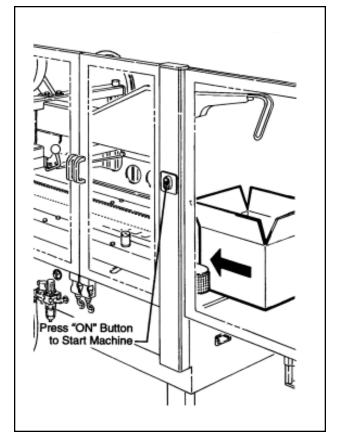


Figure 3-10 - Box Size Set-Up

### Figure 3-11

Run several test boxes through the machine, and observe the flap kicking action. Adjust the kicker cam so the kicker "kicks" earlier or later as required (refer to figure 3-8). In general, it is better to set the kicker to "kick" early because it contacts the flap higher above the score-line which results in more reliable flap folding.

### A

### WARNING

- To reduce the risk associated with pinch, entanglement, and impact hazards:
  - Keep away from moving belts and pneumatically controlled kicker

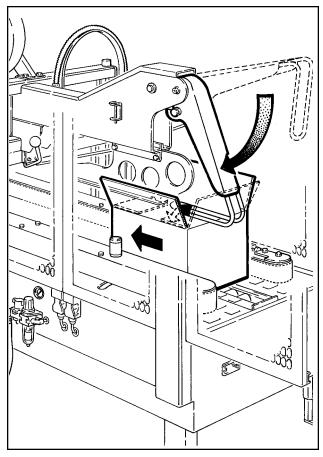


Figure 3-11 - Box Size Set-Up

#### Figure 3-12

The upper side flap folding guides can be adjusted in or out to accommodate the width of the box. For optimum performance, the side flap folding guides should be adjusted to the narrowest position which allows them to catch any side flaps that may be bent outward past vertical.

**Note –** Box flaps should not be bent outward past vertical more than 15° when entering case sealer.

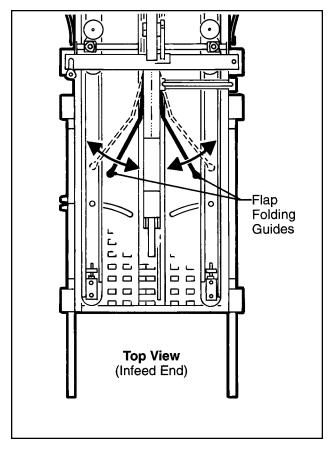


Figure 3-12 - Box Size Set-Up

### Figure 3-13

If the box is hard to move under the top head or is crushed, raise the top head slightly.

If the box movement is jerky or stops under the top head, move the side drive belts in slightly to add more pressure between the box and drive belts.

**Note:** Upper head has unique feature for overstuffed boxes. The head will raise up to 13 mm [1/2 inch] to compensate for this type of condition.

**IMPORTANT** – If drive belts are allowed to slip on box, excessive belt wear will occur.

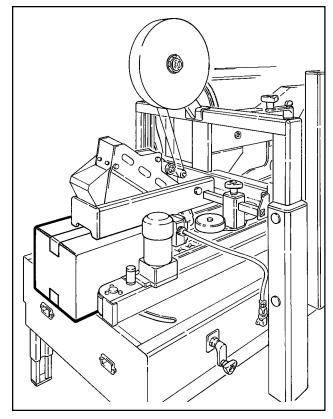


Figure 3-13 - Box Size Set-Up

### **Box Sealing**

### **WARNING**

- To reduce the risk associated with pinch, entanglement, and impact hazards:
  - Never attempt to work on any part of the machine, load tape, or remove jammed boxes from the machine while the machine is running
  - Keep hands, hair, loose clothing, and jewelry away from moving belts and taping heads
- 1. Connect electrical and air supplies.
- 2. Turn main air valve "On" and adjust air regulator if pressure does not read 5 bar gauge pressure [70 PSIG].
- 3. Press electrical "On" button to start drive belts.
- 4. Continually feed boxes to case sealer, case sealer will automatically space entrance of boxes to machine.
- 5. Turn electrical and air supplies "Off" when machine is not in use.
- 6. Reload and thread tape as necessary.
- 7. Be sure machine is cleaned and lubricated according to recommendations in "Maintenance" section of this manual.

**Note -** Box drive motors are designed to run at a moderate temperature of 40° C [104° F]. In some cases they may feel hot to the touch. Adjustment of the machine or taping heads are described in the "Adjustment" section of this manual.

#### **Box Jams**

If a box is improperly fabricated or filled, if the machine is mis-adjusted for the box being run, or if boxes enter the machine incorrectly, a box jam may occur. To clear a box jam, follow these steps:

- 1. Determine cause of box jam so corrective action can be taken to prevent reoccurrence.
- 2. Turn off machine.

### **MARNING**

#### To reduce the risk associated with mechanical and electrical hazards:

- Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads
- To reduce the risk associated with pinch, entanglement, and impact hazards:
  - Never attempt to work on any part of the machine, load tape, or remove jammed boxes from the machine while the machine is running
- 3. Crank upper head up and/or drive belts out until box is free.
- 4. Carefully pull box out of machine.



### • To reduce the risk associated with sharp blade hazards:

- Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp
- To reduce the risk associated with muscle strain:
  - Use proper body mechanics when removing or clearing jammed boxes from the machine
- 5. Readjust upper head and drive belts according to "Machine Adjustment for Box Size" instructions.
- 6. Connect air and electrical supplies.
- 7. Turn machine "On" only when it is safe to do so!

### **Maintenance**

The case sealer been designed for long, trouble free service. The machine will perform best when it receives routine maintenance and cleaning. Machine components that fail or wear excessively should be promptly repaired or replaced to prevent damage to other portions of the machine or to the product.

### **WARNING**

- To reduce the risk associated with mechanical and electrical hazards:
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance, or servicing the machine or taping heads

#### Cleaning

Note – Never attempt to remove dirt by blowing it out with compressed air. This can cause the dirt to be blown inside the motor and onto sliding surfaces which may cause premature equipment wear. Never wash down this equipment. Serious equipment damage could result.

Regular slotted containers produce a great deal of dust and paper chips when processed or handled in equipment. If this dust is allowed to build-up on machine components, it can cause component wear and overheating of drive motor. The dust build-up can best be removed from the machine by

a shop vacuum. Depending on the number and type of boxes sealed in the case sealer, this cleaning should be done approximately once per month. If the boxes sealed are dirty, or if the environment in which the machine operates is dusty, cleaning on a more frequent basis may be necessary. Excessive dirt build-up that cannot be removed by vacuuming should be wiped off with a damp cloth.

#### Lubrication

Most of the machine bearings, including the drive motor, are permanently lubricated and sealed and do not require additional lubricant.

Figure 4-1 illustrates the areas of the case sealer that require lubrication. Lubricate points indicated by arrows (♣) with SAE #30 non-detergent oil and points indicated by arrows (♣) with a small amount of multi-purpose grease.

**Note –** Wipe off excess oil and grease. It will attract dust and dirt which can cause premature equipment wear and jamming. Take care that oil and grease are not left on the surface of rollers around which tape is threaded, as it can contaminate the tape's adhesive.

TAPING HEAD LUBRICATION – See Section II, ""Maintenance – Lubrication".

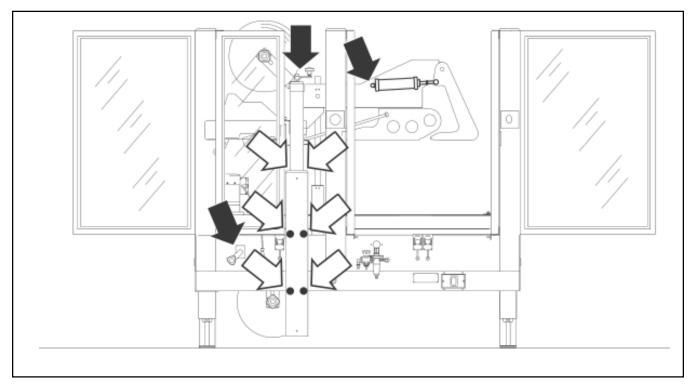


Figure 4-1 - Lubrication Points, Frame

### **WARNING**

#### • To reduce the risk associated with mechanical and electrical hazards:

- Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

#### **Drive Belt Replacement/Tension Adjustment**

**Note** – 3M recommends the replacement of drive belts in pairs, especially if belts are unevenly worn.

REPLACEMENT – STEPS 1-11 TENSION ADJUSTMENT – STEPS 1, 2, 4-6, 10 & 11

### Figure 4-2

- 1. Raise upper taping head to its fully raised position.
- 2. Disconnect motor plug (A).
- 3. Remove and retain the six screws (B) and side cover (C).
- 4. Remove and retain screws (D), cap washers (E) and spacers (F) from the front and rear arm assembly pivots.
- 5. Lift belt assembly (G) up and off arm assembly pivots.

**Note –** Keep motor in vertical position to prevent gear oil from leaking out of motor.

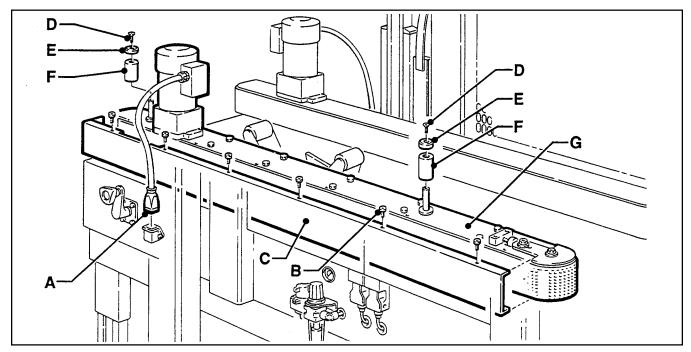


Figure 4-2 - Drive Belt Replacement

### Figure 4-3

- 6. Loosen, but do not remove lock nuts (H) on both the upper and lower belt tension assemblies.
- 7. Turn belt adjustment screws (J) clockwise to end of adjustment on both upper and lower tension assemblies.
- 8. Locate belt lacing (joint) by turning belt manually. Remove splicing with pliers. Remove and discard belt.

### **WARNING**

- To reduce the risk associated with mechanical and electrical hazards:
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

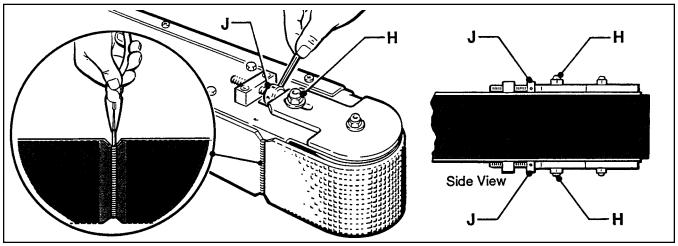


Figure 4-3 - Drive Belt Replacement/Tension Adjustment

- Important Before installing new drive belt, check belt inside surface for drive direction arrows and install belt accordingly. If no arrows are shown, belt may be installed either way.
  - Install new belt around drive rollers and insert splicing pin. Pin must not extend beyond edge of belt.
- 10. Set drive belt tension turn adjustment screws (J) equally on both upper and lower tension assemblies. Turn screws clockwise to reduce belt tension, counterclockwise to increase tension.
  - Use force gauge to pull belt outward one inch [25 mm] at midspan, as shown in Figure 4-4, with a moderate pulling force of 7 lbs. [3.5 kg]. Tighten lock nuts (H) on both tension assemblies to secure tension setting.
- 11. Assembly is reverse of disassembly.

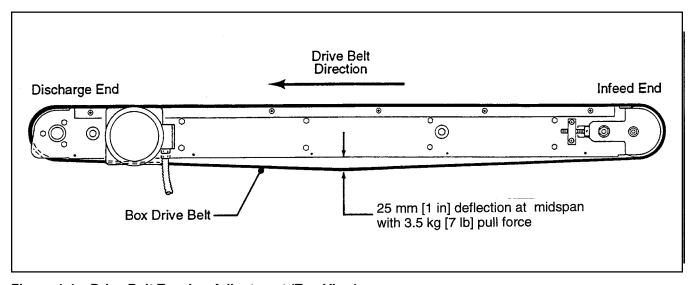


Figure 4-4 – Drive Belt Tension Adjustment (Top View)

# **WARNING**

- To reduce the risk associated with mechanical and electrical hazards:
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

### Air Line Filter - Figure 4-5

Periodically check the air line filter to drain water and clean as necessary. Do not allow water to go above the filter element.

### Circuit Breaker

The case sealer is equipped with a circuit breaker which trips if the motors are overloaded. Located inside the electrical control box on the side of the machine, the circuit breaker has been pre-set at 2.2 Amps and requires no further maintenance.



## **WARNING**

- To reduce the risk associated with mechanical and electrical hazards:
  - Allow only properly trained and qualified personnel to operate and/or service this equipment

If circuit is overloaded and circuit breaker trips, unplug machine from electrical power:

- 1. Determine cause of overload and correct.
- 2. Remove electrical enclosure cover.
- 3. Press the red "Reset" button and then the green "Start" button.
- 4. Replace cover.
- 5. Plug in machine. Wait two minutes.
- 6. Press machine "On" button, on the side guard, to resume case sealing.

### Knife Replacement, Taping Head

See Section II, "Maintenance – Blade (Knife) Replacement".

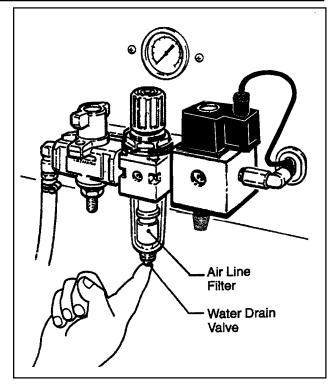


Figure 4-5 - Air Line Filter



### • To reduce the risk associated with mechanical and electrical hazards:

 Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

### **Gate Operation**

Figure 5-1

A - Permanent gate cam

**B** - Removable gate cam

C - Kicker cam

The 800af is shipped with both gate cams **A** and **B** installed. With both cams the entire range of box lengths can be run (150-760 mm [6-30 inches]). However if only boxes longer than 305 mm [12 inches] will be run, cam **B** can be removed to increase the production rate. Refer to the box rate chart in specification section.

#### **Drive Belt Tension**

Belt tension must be adequate to positively move boxes through the machine and belts should run fully on the surface of the pulleys at each end of the frame. The idler pulleys on the infeed end are positioned by tension adjustment screws. To adjust tension, see "Maintenance – Drive Belt Replacement/Tension Adjustment".

### Taping Head Adjustments - Refer to Section II

TAPE WEB ALIGNMENT - Section II

TAPE DRUM FRICTION BRAKE - Section II

APPLYING MECHANISM SPRING - Section II

ONE-WAY TENSION ROLLER - Section II

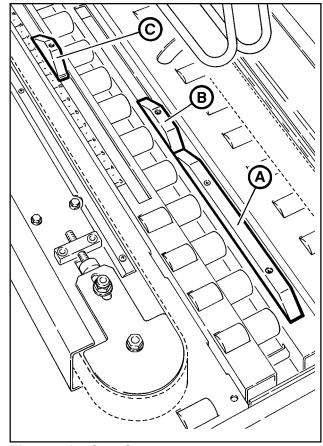


Figure 5-1 - Gate Cams

# **WARNING**

### • To reduce the risk associated with mechanical and electrical hazards:

 Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

### **Upper Taping Head Leveling**

If the upper taping head is not horizontal, it can be leveled by adjusting the self-locking nut.

- 1. Loosen the five bolts on each side of crossbar shown in Figure 5-2A.
- 2. Remove access cover as shown in Figure 5-2B and (using M13 hex key wrench) tighten or loosen M8 self-locking nut until upper head is level.
- 3. Take measurement from exit end of upper head assembly and front of flap folding ski to machine bed, as shown in Figure 5-2. Upper assembly must be level  $\pm 1.5$  mm [ $\pm 1/16$  inch].
- 4. Retighten five bolts on each side of crossbar to secure adjustment.

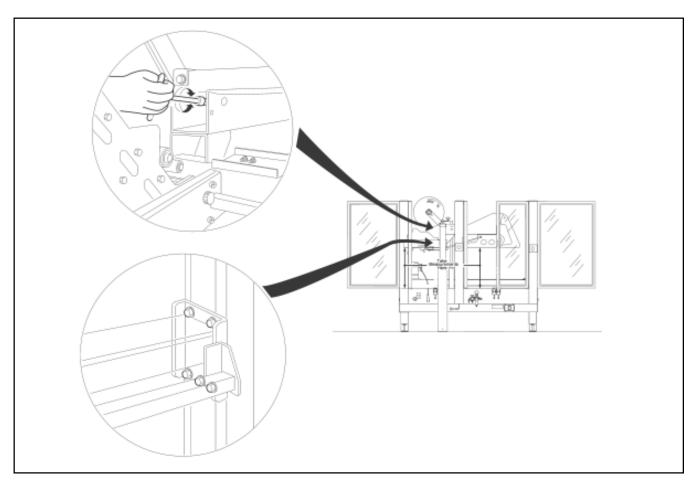


Figure 5-2 - Upper Taping Head Leveling

## Adjustments (Continued)

# **WARNING**

### To reduce the risk associated with mechanical and electrical hazards:

 Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

### **Gate Pressure Regulator**

Figure 5-3

The gate air pressure is controlled by a regulator mounted under the machine frame. This provides adjustment of the gate lifting force. When light weight boxes are being run the gate pressure can be reduced to minimize lifting of the box.

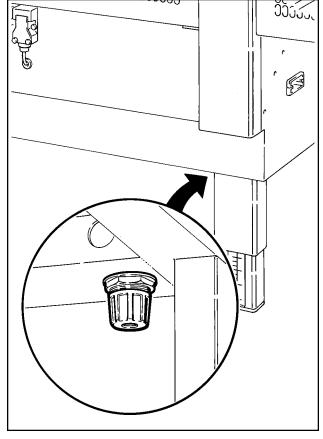


Figure 5-3 - Gate Pressure Regulator

## Gate Stroke Setting

Figure 5-4

The machine is initially set at the maximum gate lift of 25 mm [1 inch]. However this can be reduced if needed for special situations. To do this, remove the center roller section and turn the stop nuts clockwise until the desired lift is achieved.

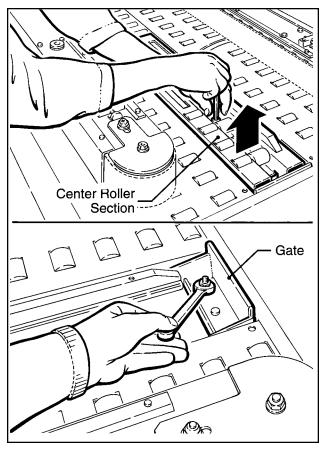


Figure 5-4 - Gate Stroke Setting

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## **Special Set-Up Procedure**

# **WARNING**

- To reduce the risk associated with mechanical and electrical hazards:
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

#### **Changing Drive Belt Height**

The drive belt assemblies can be raised 50 mm [2 inches] to provide better conveying of tall boxes. This change increase the minimum box height that can be taped to 190 mm [7-1/4 inches].

### DISASSEMBLY - Figure 6-1

- 1. Using the height adjustment crank, raise the upper taping head to its fully raised position.
- 2. Remove and retain the M6 x 16 flat head cap screw (A), special washer (B) and spacer (C) from the front and rear arm assembly pivots.
- 3. Lift drive belt assembly (D) up off the arm assembly pivots.

**Note** – Keep motor in vertical position to prevent gear oil from leaking out of motor.

### REASSEMBLY – Figure 6-2

- 4. Reassemble the spacer (C) onto the front and rear arm assembly pivots first.
- Install the belt drive assembly (D) onto the pivots and secure with special washers (B) and M6 x 16 flat head cap screws (A).

**Note** – Both drive belt assemblies must be installed at the same operating height.

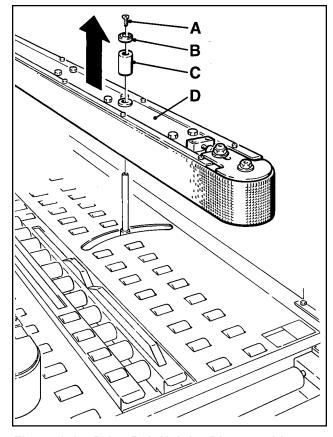


Figure 6-1 – Drive Belt Height, Disassembly

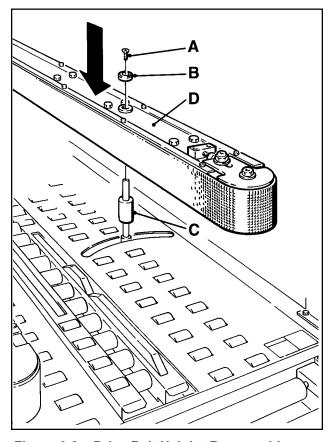


Figure 6-2 - Drive Belt Height, Reassembly

## Special Set-Up Procedure (Continued)

Outer Column Re-Positioning (Refer to Figure 6-4)

Moving the outer columns up one set of mounting holes increases the maximum box size handled by the case sealer from 620 mm [24-1/2 inches] to 725 mm [28-1/2 inches].

# **WARNING**

- To reduce the risk associated with muscle strain:
  - Use the appropriate rigging and material handling equipment when lifting or repositioning this equipment.

To move the outer columns up one set of mounting holes:

- 1. Crank side drive belts to full open position.
- 2. Crank upper taping head frame assembly up approximately 330 mm [13 inches] from machine bed.
- 3. Place solid blocks approximately 305 mm [12 inches] high beneath upper taping head frame at rear of taping head and under front flap folding ski (Figure 6-4A).

Note - Blocks (front and rear) must be the same height in order to keep upper frame level.

- 4. Crank upper taping head frame down until weight of upper frame is fully on blocks.
- 5. Remove and retain six mounting screws in each outer column assembly (Figure 6-4B).

**IMPORTANT**— A second person should assist with this part of set-up to hold (steady) upper frame until columns are re-positioned and column screws are installed and tightened.

- 6. Crank outer column up 100 mm [4 inches] and re-install six (6) screws in each column. Tighten screws.
- 7. Crank upper taping head up and remove blocks.
- 8. Check horizontal alignment of upper taping head frame and adjust as described in "Adjustments Upper Taping Head Leveling".

## Special Set-Up Procedure (Continued)

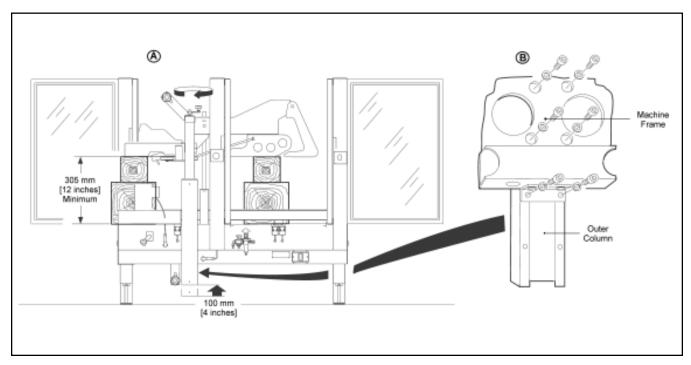


Figure 6-4 - Column Re-Positioning

## **Troubleshooting**

The Troubleshooting Guide lists some possible machine problems, causes and corrections. Also see Section II "Troubleshooting" for taping head problems.

Note - Adjustment of the machine or taping heads are described in "Adjustments", Section I and II of this manual.

### **Troubleshooting Guide**

| Problem                         | Cause  | Correction                                      |
|---------------------------------|--|---|
| Drive belts do not convey boxes | Worn drive belts                               | Replace drive belts                             |
|                                 | Top taping head does not apply enough pressure | Adjust the box height adjustment with the crank |
|                                 | Taping head applying spring holder missing     | Replace spring holder                           |
|                                 | Taping head applying spring set too high       | Reduce spring pressure                          |
| Drive belts do not turn         | Worn or missing friction rings                 | Replace friction rings                          |
|                                 | Drive belt tension too low                     | Adjust belt tension                             |
|                                 | Electrical disconnect                          | Check power and electrical plug                 |
|                                 | Circuit breaker not at correct setting         | Set to correct current value                    |
|                                 | Motor not turning                              | Evaluate problem and correct                    |
| Drive belts break               | Worn belt                                      | Replace belt                                    |
| Squeaking noise as boxes pass   | Dry compression bearings                       | Lubricate compression bearings                  |
| through machine                 | Dry column bearings                            | Lubricate column bearings                       |
| Tape not centered on box seam   | Centering guides not centered                  | Adjust centering guides                         |
|                                 | Box flaps not of equal length                  | Check box specifications                        |
|                                 |  |   |

# Troubleshooting (Continued)

## **Troubleshooting Guide**

| Problem                                     | Cause   | Correction                               |
|---|---|--|
| Flap kicker kicks at wrong time             | Kicker cam improperly set   | Reposition kicker cam                    |
|   | Air cylinder flow controls out of adjustment  | Readjust flow controls                   |
| Gate does not raise to stop next box        | Too much air pressure on gate cylinder lifts box off of gate cam                                  | Reduce gate air pressure using regulator |
|   | Incoming boxes not low enough and therefore not actuating cam                                     |  |
| Gate retracts too soon/kicker does not kick | The removable portion of the gate cam has been removed and boxes shorter than 12 inches are being | Reinstall removable gate cam portion     |
| Two boxes are taped together                | shorter than 12 inches are being run  |  |

# **MARNING**

### • To reduce the risk associated with mechanical and electrical hazards:

 Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

| Item | Parts Dwg.<br>Ref. No. | Description   | Item | Parts Dwg.<br>Ref. No. | Description   |
|------|------------------------|---|------|------------------------|---|
| 1    | 10473-4                | Exhaust Valve - Manual, SMC EVHS-<br>4500, F02 x116 | 10   | 10473-27               | Valve - Power, 3-Way, Spring Return,<br>Single Pilot, SMC V2A-5120-01 |
| 2    | 10473-2                | Air Regulator/Filter - SMC EAW - 2000               | 11   | 10473-44               | Valve - Power, 3-Way, Double Pilot, SMC                               |
| 3    | 10473-9                | Gauge - Air Pressure                                |      |                        | EVFA-3230-02F   |
| 4    | 10473-11               | Solenoid Valve- Slow Start, Festo                   | 12   | 10473-23               | Valve - One Shot, Festo VLK-3-PK-3                                    |
|      |                        | MFHE- 3-1/4"  | 13   | 10473-31               | Flow Control -SMC AS2000F-06  |
| 5    | 10473-51               | Coil - Solenoid Valve, Festo MSFW                   | 14   | 10473-36               | Valve - Quick Exhaust, Festo SEU-1/8"                                 |
|      |                        | 110V, 50/60 Hz                                      | 15   | 10473-43               | Flow Control - SMC EAS 2201F-02-08S                                   |
| 6    | 10473-15               | Manifold - Festo FR-8-1/8"                          | 16   | 10473-34               | Hinge Mount, SMC D40  |
| 7    | 10473-39               | Indicator - Air Pressure, SMC VR3100-1              | 17   | 10473-32               | Air Cylinder - Gate, SMC ECQ2B40-25D-XC                               |
| 8    | 10473-24               | Regulator - Gate, SMC EAR 111-F02-1                 | 18   | 10473-33               | Ball Joint, JS20-8-125  |
| 9    | 10473-20               | Valve - Mechanical, Festo R-E-M5                    | 19   | 10473-41               | Hinge Mount, SMC D40  |
|      |                        | Turro moviminosi, i coto i e mo                     | 20   | 10473-40               | Air Cylinder - Kicker, SMC C92SDB40-125-F                             |

NOTE : Component and reference number shown. Refer to parts list for part number

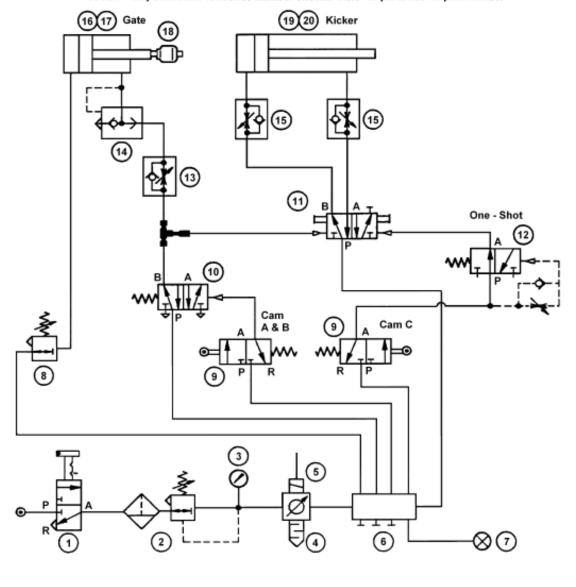


Figure 7-1 – Pneumatic Diagram

# **MARNING**

- To reduce the risk associated with mechanical and electrical hazards:
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

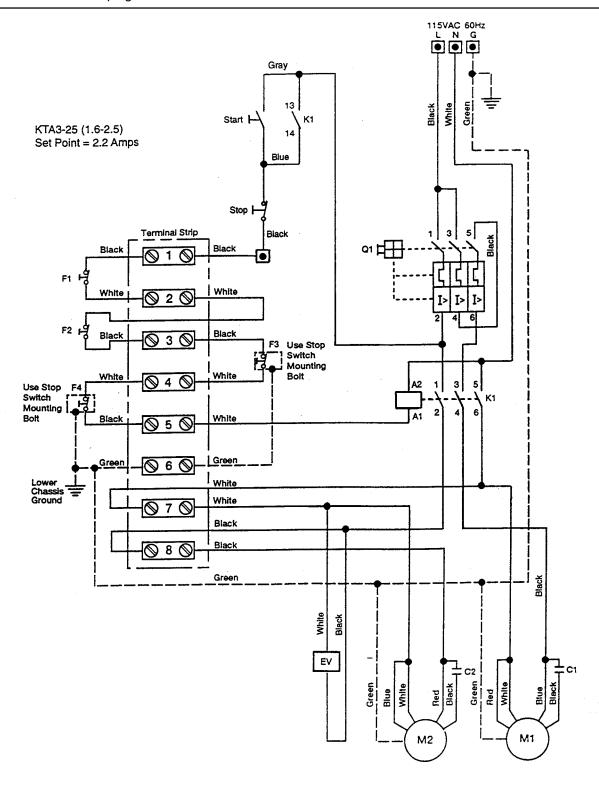
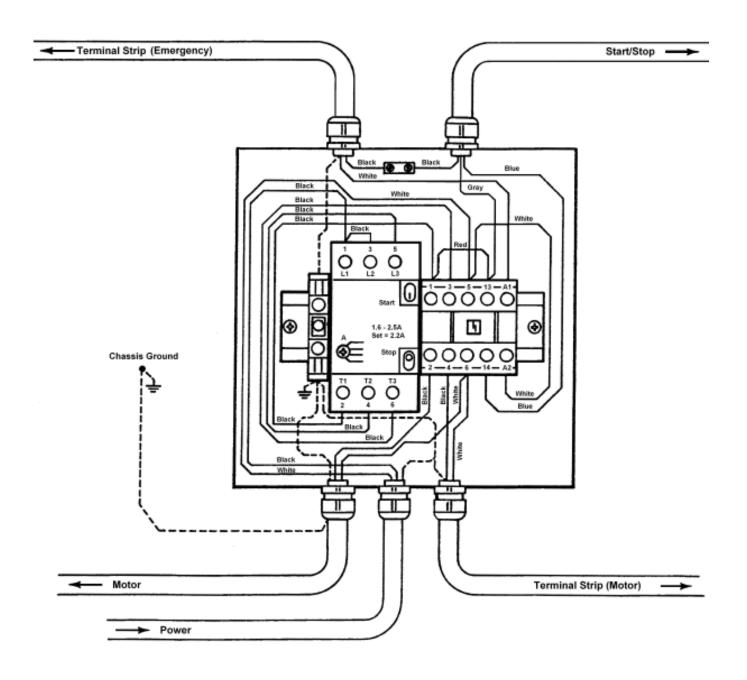


Figure 7-2 - Electrical Diagram



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## **Spare and Miscellaneous Parts**

#### **Spare Parts**

The following parts are normal wear items and should be ordered and kept on hand as used.

| Qty. | Ref. No.          | Part Number    | Description        |
|------|-------------------|----------------|--------------------|
| 2    | 10472-66 (Sec. I) | 78-8076-4865-0 | Belt – Drive W/Pin |

In addition, a tool/spare parts kit supplied with the 800af3 Adjustable Case Sealer contains the following spare parts:

| Qty. | Ref. No.           | Part Number    | Description              |   |
|------|--------------------|----------------|--------------------------|---|
| 1    | A4 14 12/Soc II)   | 78-8060-8237-2 | Spring Upper Extension   | _ |
| 1    | A4-14-12 (Sec. II) |                | Spring - Upper Extension |   |
| 1    | A4-20-12 (Sec. II) | 78-8060-8394-1 | Spring - Lower Extension |   |
| 2    | A4-16-3 (Sec. II)  | 78-8060-8419-6 | Knife – 65 mm/2.56 Inch  |   |
| 4    | AY-16-14 (Sec. II) | 78-8060-8340-4 | Spring – Cutting         |   |

All the above listed parts can be ordered separately and when used should be ordered and kept on hand for spares.

### Label Kit

In the event that any labels are damaged or destroyed, they must be replaced to ensure operator safety. A label kit, part number 78-8113-6876-6 is available as a stock item. It contains all the safety labels used on the 800af Adjustable Case Sealer. Labels can also be purchased separately. See Parts Drawing/List, pages 86 and 87.

### **Tool and Parts Kit**

A tool kit, part number 78-8054-8732-5, is available as a stock item. The kit contains the necessary open end and hex socket wrenches for use with the metric fasteners on the case sealer. The threading tool, part number 78-8076-4726-4 contained in above kit is also available as a replacement stock item.

### **Replacement Parts Ordering Information and Service**

Refer to first page of this manual "Replacement Parts and Service Information" for parts ordering information.

# **Options/Accessories**

For additional information on the options/accessories listed below, contact your 3M Representative.

| Part Number    | Option/Accessory                                   |
|----------------|--|
| 70-0064-0379-7 | Caster Kit Attachment                              |
| 78-8060-8156-4 | AccuGlide SST 2 Inch Upper Taping Head, Type 18900 |
| 78-8060-8157-2 | AccuGlide SST 2 Inch Lower Taping Head, Type 18900 |

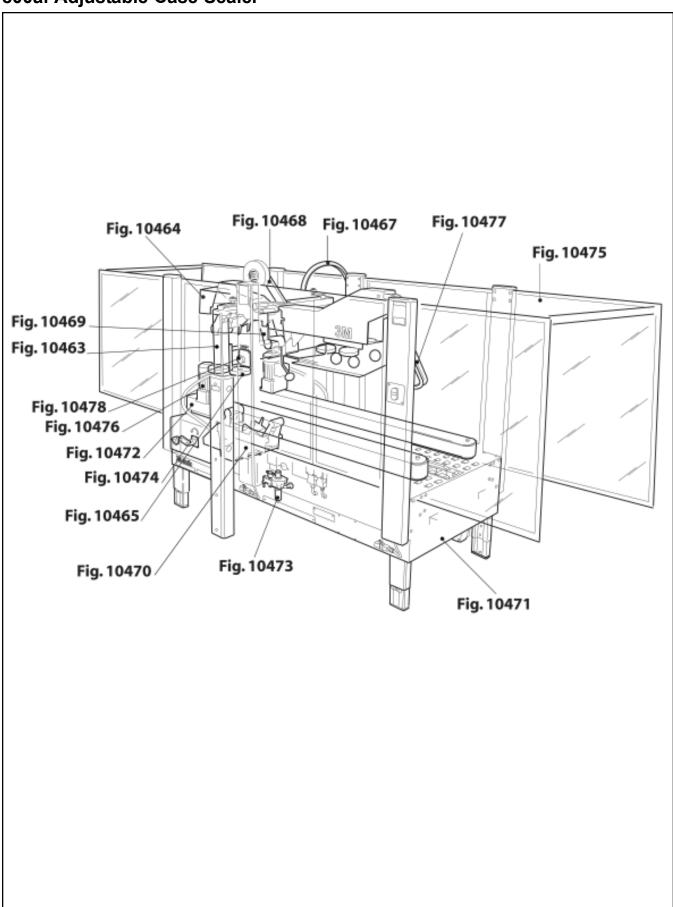
## Replacement Parts – Illustrations and Parts Lists 800af-s Stainless Steel Adjustable Case Sealer, Type 10500 (2 Inch Width Taping Heads)

## Frame Assemblies

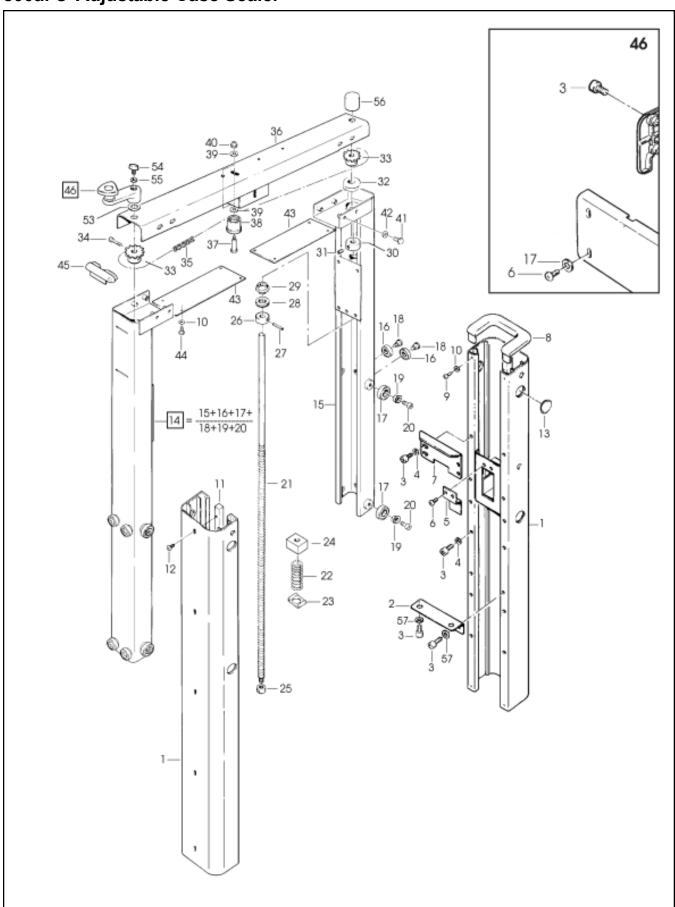
| 1. | Refer to <b>Frame Assemblies</b> Figure to find all the parts illustrations identified by <b>figure numbers</b> .   |
|----|---|
| 2. | Refer to the <b>Figure or Figures</b> to determine the <b>individual parts</b> required and the <b>parts reference number</b> .   |
| 3. | The <b>replacement parts list</b> , that follows each illustration, includes the <b>part number</b> and <b>part description</b> for the parts in that illustration.   |
|    | <b>Note</b> – The complete description has been included for standard fasteners and some commercially available components.   |
| 4. | Refer to the first page of this instruction manual "Replacement Parts and Service Information" for replacement parts ordering information.  |
|    | <b>IMPORTANT</b> – Not all the parts listed are normally stocked items. Some parts or assemblies shown are available only on a special order basis. Contact 3M/Tape Dispenser Parts to confirm item availability. |

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## 800af Adjustable Case Sealer



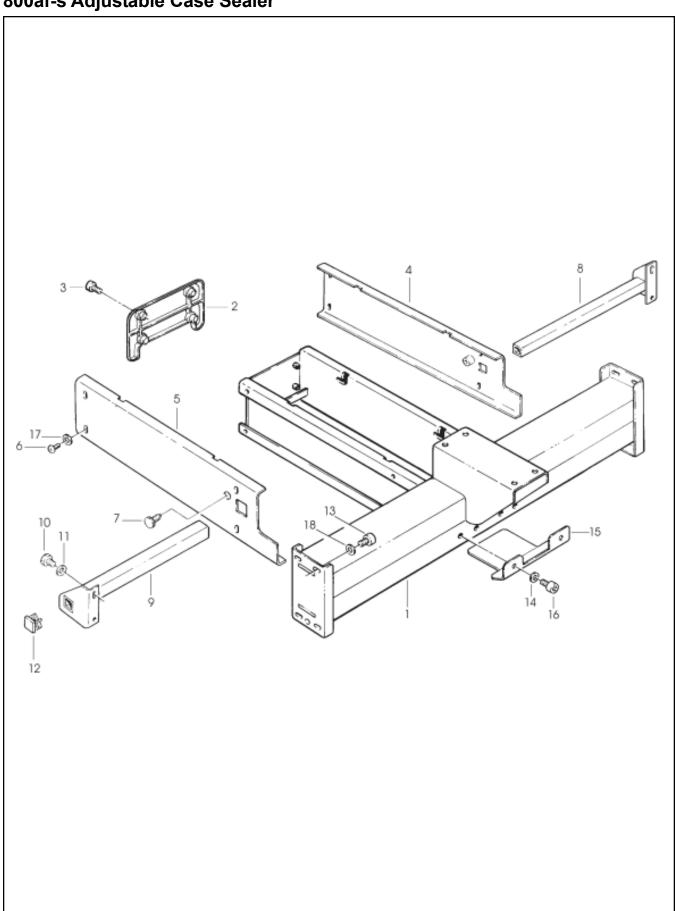
800af-s Adjustable Case Sealer



**Figure 10463** 

| Ref. No. | 3M Part No.    | Description                 |
|----------|----------------|-----------------------------|
| 10463-1  | 78-8134-2099-5 | Column - Outer              |
| 10463-2  | 78-8134-1907-0 | Plate - Column Mounting     |
| 10463-3  | 78-8060-8332-1 | Screw - Soc.Hd. M8x16       |
| 10463-4  | 78-8060-8308-1 | Washer - Flat, M8           |
| 10463-5  | 78-8134-2100-1 | Plate - Nut Stop            |
| 10463-6  | 78-8134-1911-2 | Screw - M5x12               |
| 10463-7  | 78-8134-1909-6 | Stop - Height               |
| 10463-8  | 78-8060-8491-5 | Cap - Column                |
| 10463-9  | 78-8134-1908-8 | Screw - Self Tapping, 8Px13 |
| 10463-10 | 78-8060-8297-6 | Washer - Flat, M4           |
| 10463-11 | 78-8134-2101-9 | Guide - Outer Column        |
| 10463-12 | 78-8134-2102-7 | Screw - M6x12               |
| 10463-13 | 78-8076-4812-2 | Plug - Outer Column         |
| 10463-14 | 78-8134-2103-5 | Column Assy - Inner         |
| 10463-15 | 78-8134-2104-3 | Column - Inner              |
| 10463-16 | 78-8134-2105-0 | Bearing - 6001-2RS          |
| 10463-17 | 78-8134-2106-8 | Bearing - 6002-2RS          |
| 10463-18 | 78-8134-2107-6 | Screw - Bearing             |
| 10463-19 | 78-8134-2108-4 | Bushing - Eccentric         |
| 10463-20 | 78-8060-8331-3 | Screw - Soc.Hd. M6x16       |
| 10463-21 | 78-8134-2109-2 | Lead Screw                  |
| 10463-22 | 78-8134-1915-3 | Spring                      |
| 10463-23 | 78-8054-8970-1 | Bed Plate - Spring          |
| 10463-24 | 78-8091-0551-9 | Nut - Lead Screw            |
| 10463-25 | 78-8060-8284-4 | Nut - Special               |
| 10463-26 | 78-8060-8271-1 | Collar                      |
| 10463-27 | 78-8060-8343-8 | Pin                         |
| 10463-28 | 78-8134-1916-1 | Bearing                     |
| 10463-29 | 78-8054-8583-2 | Bushing                     |
| 10463-30 | 78-8134-1917-9 | Bushing - Lead Screw        |
| 10463-31 | 78-8134-1918-7 | Set Screw - M6x8            |
| 10463-32 | 78-8060-8498-0 | Bushing - Inner Column      |
| 10463-33 | 78-8134-1919-5 | Sprocket - 3/8" Z=13        |
| 10463-34 | 78-8060-8310-7 | Screw - Soc.Hd. M4x25       |
| 10463-35 | 78-8134-2110-0 | Chain - 3/8", 197 pitch     |
| 10463-36 | 78-8134-2111-8 | Crossmember - Chain         |
| 10463-37 | 78-8060-8295-1 | Idler Screw                 |
| 10463-38 | 78-8070-1503-3 | Roller - Chain Tension      |
| 10463-39 | 78-8060-8296-8 | Washer - Triple, M6         |
| 10463-40 | 78-8060-8318-0 | Nut - Self Locking, M6      |
| 10463-41 | 78-8060-8204-2 | Screw - Special, M6x12      |
| 10463-42 | 78-8060-8312-3 | Washer - Flat, M6           |
| 10463-43 | 78-8134-2112-6 | Cover - Chain               |
| 10463-44 | 78-8100-0905-6 | Screw - Hex.Hd, M4x10       |
| 10463-45 | 78-8070-1505-8 | Cap - Inner Column          |
| 10463-46 | 78-8134-1923-7 | Crank Assy                  |
| 10463-47 | 78-8076-5422-9 | Crank                       |
| 10463-48 | 78-8134-1924-5 | Shaft - Crank               |
| 10463-49 | 78-8060-8327-1 | Screw - Flat Hd, M5x16      |
| 10463-50 | 78-8070-1510-8 | Washer - Nylon /7x15x1      |
| 10463-51 | 78-8134-1925-2 | Bushing                     |
| 10463-52 | 78-8070-1512-4 | Knob<br>Washar Crank        |
| 10463-53 | 78-8076-4800-7 | Washer - Crank              |
| 10463-54 | 78-8134-1927-8 | Key - Stop                  |
| 10463-55 | 78-8134-19260  | Washer - Crank              |
| 10463-56 | 78-8070-1506-6 | Cover - Screw               |
| 10463-57 | 78-8060-8335-4 | Washer - Triple, M8         |

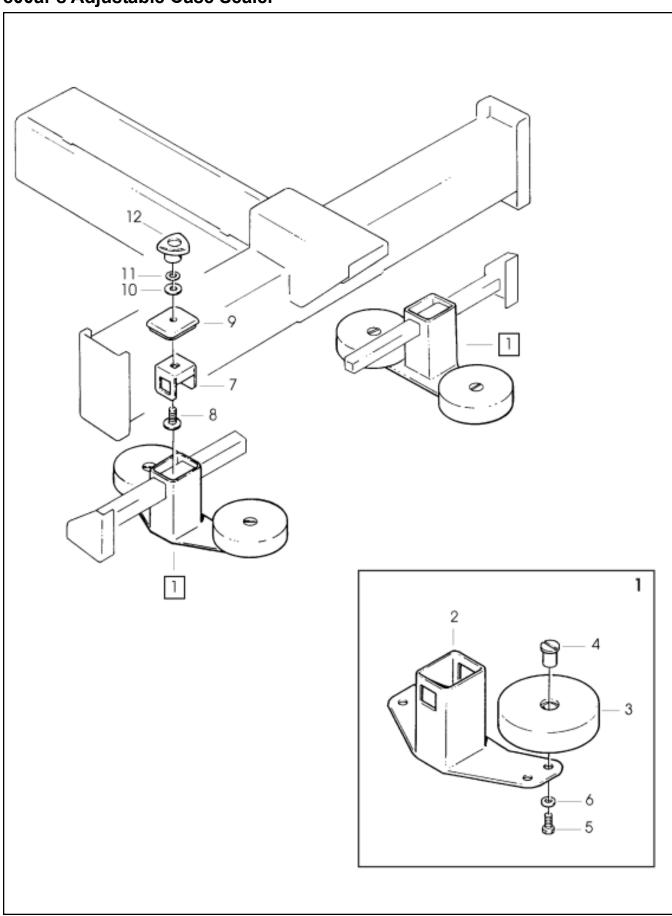
800af-s Adjustable Case Sealer



**Figure 10464** 

| Ref. No. | 3M Part No.    | Description            |
|----------|----------------|------------------------|
| 10464-1  | 78-8134-2113-4 | Support - Upper Head   |
| 10464-2  | 78-8076-4823-9 | Cover - Rear           |
| 10464-3  | 78-8134-2083-9 | Screw - Soc.Hd, M5x20  |
| 10464-4  | 78-8134-2114-2 | Frame - Upper, Right   |
| 10464-5  | 78-8134-2115-9 | Frame - Upper, Left    |
| 10464-6  | 78-8134-2000-3 | Screw - M5x10          |
| 10464-7  | 78-8134-2116-7 | Block - Upper Head     |
| 10464-8  | 78-8134-2117-5 | Support - Right Roller |
| 10464-9  | 78-8134-2118-3 | Support - Left Roller  |
| 10464-10 | 78-8060-8295-0 | Screw - Hex.Hd, M6x16  |
| 10464-11 | 78-8060-8296-8 | Washer - Triple, M6    |
| 10464-12 | 78-8052-6652-1 | Cap - End              |
| 10464-13 | 78-8060-8307-3 | Screw - Soc.Hd, M8x20  |
| 10464-14 | 78-8060-8308-1 | Washer - Flat, M8      |
| 10464-15 | 78-8134-2119-1 | Slide                  |
| 10464-16 | 78-8060-8332-1 | Screw - Soc.hd, M8x16  |
| 10464-17 | 78-8134-2120-9 | Washer - Triple, M5    |
| 10464-18 | 78-8134-2121-7 | Washer - Special       |
|          |                |                        |

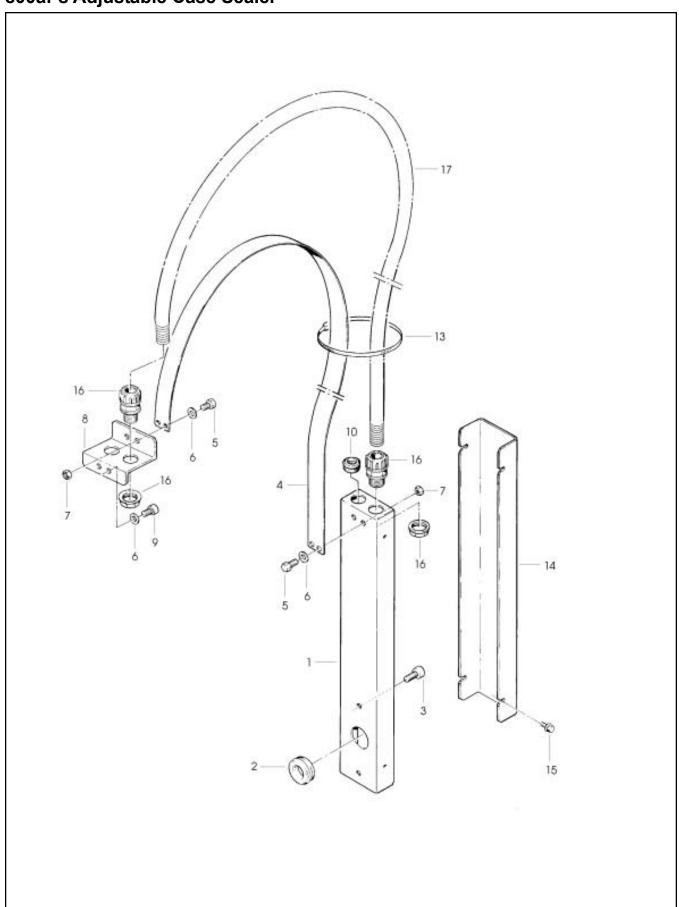
## 800af-s Adjustable Case Sealer



**Figure 10465** 

| Ref. No. | 3M Part No.    | Description                  |
|----------|----------------|------------------------------|
| 10465-1  | 78-8134-1900-5 | Side Compression Roller Assy |
| 10465-2  | 78-8134-1901-3 | Support - Roller             |
| 10465-3  | 78-8076-4628-2 | Roller - Compression         |
| 10465-4  | 78-8134-1902-1 | Shaft - Roller               |
| 10465-5  | 78-8060-8323-0 | Screw - Hex.Hd, M8x16        |
| 10465-6  | 78-8060-8308-1 | Washer - Flat, M8            |
| 10465-7  | 78-8134-1903-9 | Plate - Tube                 |
| 10465-8  | 78-8134-1904-7 | Screw - M10x35               |
| 10465-9  | 78-8134-1905-4 | Cap - Support                |
| 10465-10 | 78-8017-9074-8 | Washer - Nylon               |
| 10465-11 | 78-8060-8315-6 | Washer - Flat, M10           |
| 10465-12 | 78-8070-1549-6 | Knob                         |

800af-s Adjustable Case Sealer



**Figure 10467** 

| Ref. No. | 3M Part No.    | Description             |
|----------|----------------|-------------------------|
| 10467-1  | 78-8134-1928-6 | Housing - Wire          |
| 10467-2  | 78-8076-4702-5 | Grommet /28             |
| 10467-3  | 78-8060-8332-1 | Screw - Soc.Hd, M8x16   |
| 10467-4  | 78-8134-2130-8 | Strap - Wire            |
| 10467-5  | 78-8060-8300-8 | Screw - Hex.Hd, M5x10   |
| 10467-6  | 78-8060-8303-2 | Washer - Flat, M5       |
| 10467-7  | 78-8060-8293-5 | Nut - Metric, M5        |
| 10467-8  | 78-8134-2131-6 | Plate - Strap           |
| 10467-9  | 78-8060-8322-2 | Screw - Soc.Hd, M5x12   |
| 10467-10 | 78-8060-7758-8 | Fairlead /20            |
| 10467-13 | 78-8060-8029-3 | Clamp                   |
| 10467-14 | 78-8134-1931-0 | Cover - Housing         |
| 10467-15 | 78-8134-2132-4 | Screw - Hex.Hd, M4x8    |
| 10467-16 | 78-8076-4715-7 | Cord Grip S5T13,5       |
| 10467-17 | 78-8134-1975-7 | Cable 491P 3 G 1,5, 6mt |

## 800af-s Adjustable Case Sealer

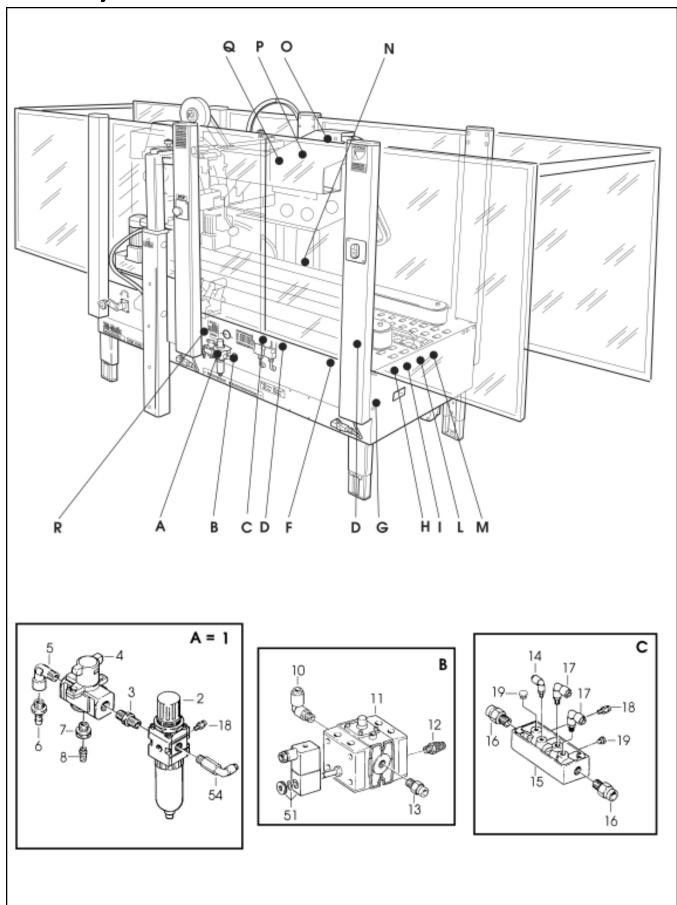


Figure 10473/1 of 2

**Figure 10473** (Page 1 of 2)

| Ref. No. | 3M Part No.    | Description                   |
|----------|----------------|-------------------------------|
|          |                |                               |
| 10473-1  | 78-8091-0424-9 | Filter/Regulator Assy         |
| 10473-2  | 26-1014-4558-8 | Filter/Regulator W/Metal Bowl |
| 10473-3  | 78-8060-7899-0 | Nipple RA 012 1/4"-1/4"       |
| 10473-4  | 78-8091-0715-0 | Valve - EVHS-4500-F02-X116    |
| 10473-5  | 78-8060-7900-6 | Union RA 022 1/4"-1/4"        |
| 10473-6  | 26-1005-6897-6 | Hose Connector                |
| 10473-7  | 78-8076-4670-4 | Reduction 3/8"-1/8"           |
| 10473-8  | 26-1005-6890-1 | Muffler 1/8"                  |
| 10473-9  | 78-8054-8838-0 | Gauge - Air                   |
| 10473-10 | 78-8076-4885-8 | Elbow KQL08-02S               |
| 10473-11 | 78-8091-0419-9 | Valve - MFHE—3-1/4"           |
| 10473-12 | 78-8076-4886-6 | Muffler 1/4"                  |
| 10473-13 | 78-8076-4887-4 | Union KQH08-02S               |
| 10473-14 | 78-8076-4888-2 | Elbow KQL04-01S               |
| 10473-15 | 78-8060-7651-5 | Union FR-8-1/8"               |
| 10473-16 | 78-8076-4889-0 | Union KHQ08-03S               |
| 10473-17 | 78-8076-4890-8 | Elbow KQL06-01S               |
| 10473-18 | 78-8076-4891-6 | Union KQH04-01S               |
| 10473-19 | 78-8060-7690-3 | Сар                           |
| 10473-20 | 26-1005-6358-9 | 3-Way Valve                   |
| 10473-21 | 78-8076-4892-4 | Elbow KQL04-M5                |
| 10473-22 | 78-8091-0423-1 | Gauge W/Support               |
| 10473-23 | 78-8060-7656-4 | Valve - One Shot              |
| 10473-24 | 78-8076-4894-0 | Pressure Regulator            |
| 10473-25 | 78-8076-4895-7 | Elbow KQL06-02S               |
| 10473-26 | 78-8076-4896-5 | Union KQH06-02S               |
| 10473-27 | 78-8076-4677-9 | Valve - One Shot              |

## 800af-s Adjustable Case Sealer

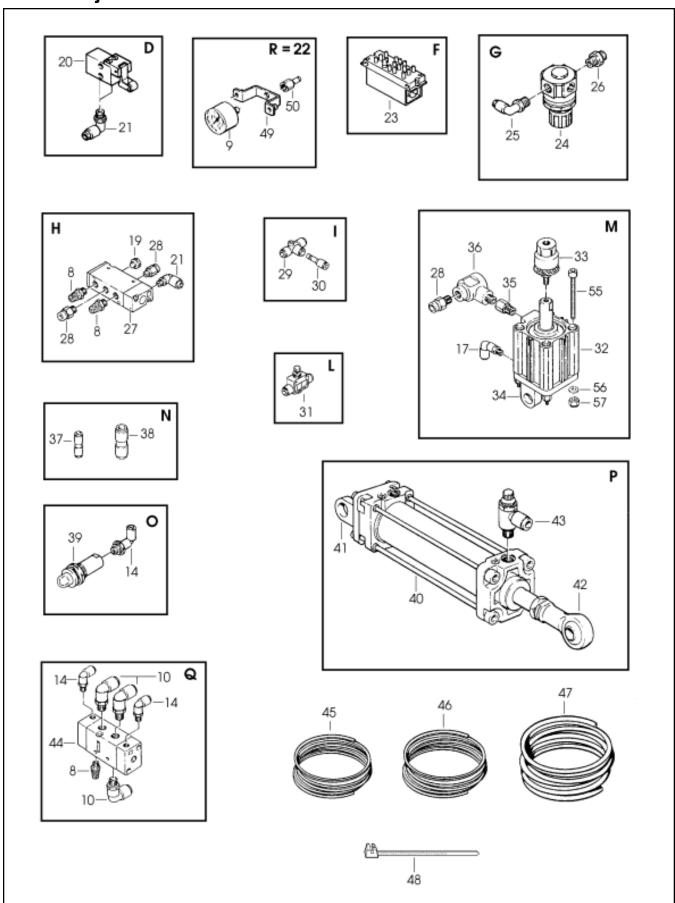
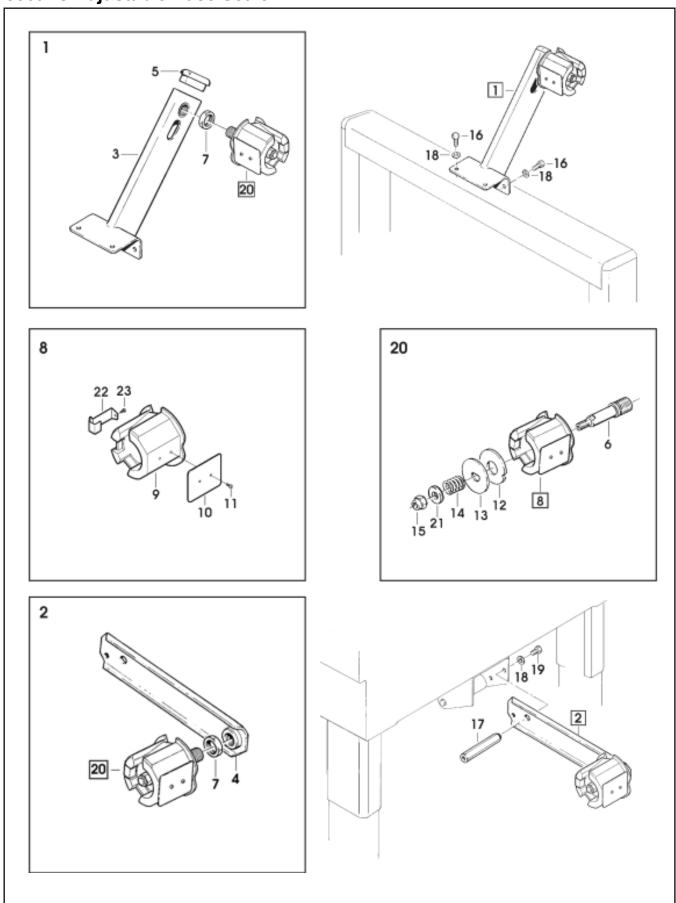


Figure 10473/2 of 2

# **Figure 10473** (Page 2 of 2)

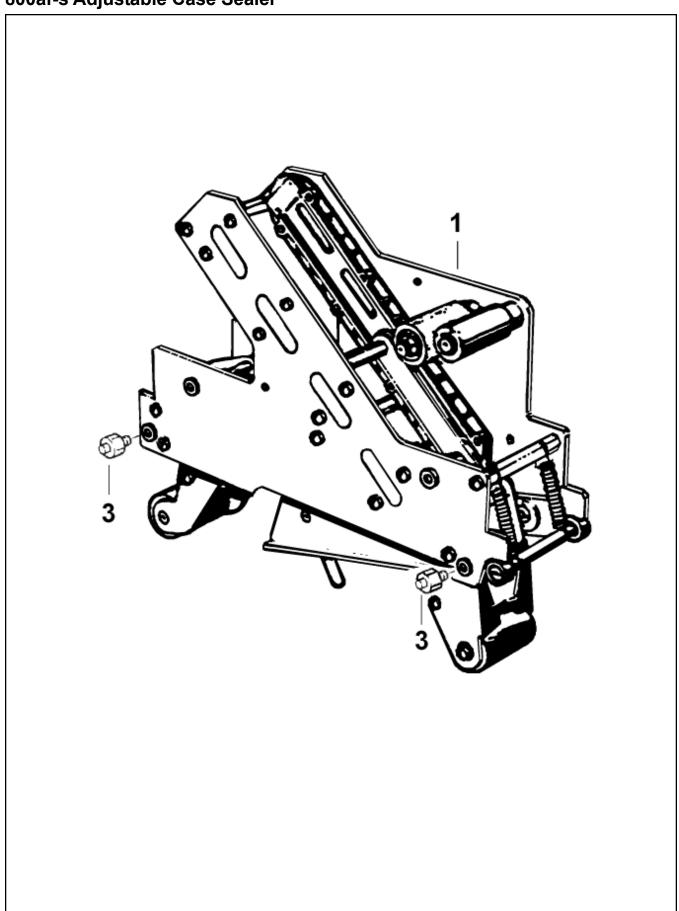
| Ref. No. | 3M Part No.    | Description                |
|----------|----------------|----------------------------|
| 10473-28 | 78-8076-4897-3 | Union KQH06-01S            |
| 10473-29 | 78-8076-4898-1 | Union KQT06-00             |
| 10473-30 | 78-8076-4899-9 | Union KQR04-06             |
| 10473-31 | 78-8076-4900-5 | Flow Regulator             |
| 10473-32 | 78-8134-2230-6 | Air Cylinder - Gate        |
| 10473-33 | 78-8076-4902-1 | Joint - Ball               |
| 10473-34 | 78-8076-4903-9 | Hinge - Cylinder /40-25    |
| 10473-35 | 78-8076-4904-7 | Extension, Conical         |
| 10473-36 | 78-8013-9935-9 | Valve - Quick Exhaust      |
| 10473-37 | 78-8076-4905-4 | Union KQH04-00             |
| 10473-38 | 78-8076-4906-2 | Union KQH08-00             |
| 10473-39 | 78-8076-4665-4 | Indicator - Visual         |
| 10473-40 | 78-8134-2232-2 | Air Cylinder - Kicker      |
| 10473-41 | 78-8076-4908-8 | Hinge - Cylinder /40-125   |
| 10473-42 | 78-8057-5747-9 | Mount - Cylinder           |
| 10473-43 | 78-8076-4909-6 | Flow Regulator             |
| 10473-44 | 78-8076-4910-4 | Valve                      |
| 10473-45 | 78-8119-8666-6 | Tube - Air, TU0425B, 5mt   |
| 10473-46 | 78-8119-8667-4 | Tube - Air, TU0604B, 5mt   |
| 10473-47 | 78-8119-8668-2 | Tube - Air, TU0805B, 5mt   |
| 10473-48 | 78-8076-5228-0 | Clamp - 95x2,4             |
| 10473-49 | 78-8134-2231-4 | Bracket                    |
| 10473-50 | 78-8076-4672-0 | Union - Straight, Female   |
| 10473-51 | 78-8091-0420-7 | Coil - Magnetic, MSFW 110V |
| 10473-54 | 78-8091-0422-3 | Elbow KQW08-02S            |
| 10473-55 | 78-8134-2167-0 | Screw - Soc.Hd, M5x70      |
| 10473-56 | 78-8060-8303-2 | Washer - Flat, M5          |
| 10473-57 | 78-8134-2085-4 | Nut - Self Locking, M5     |

# 800af-s Adjustable Case Sealer



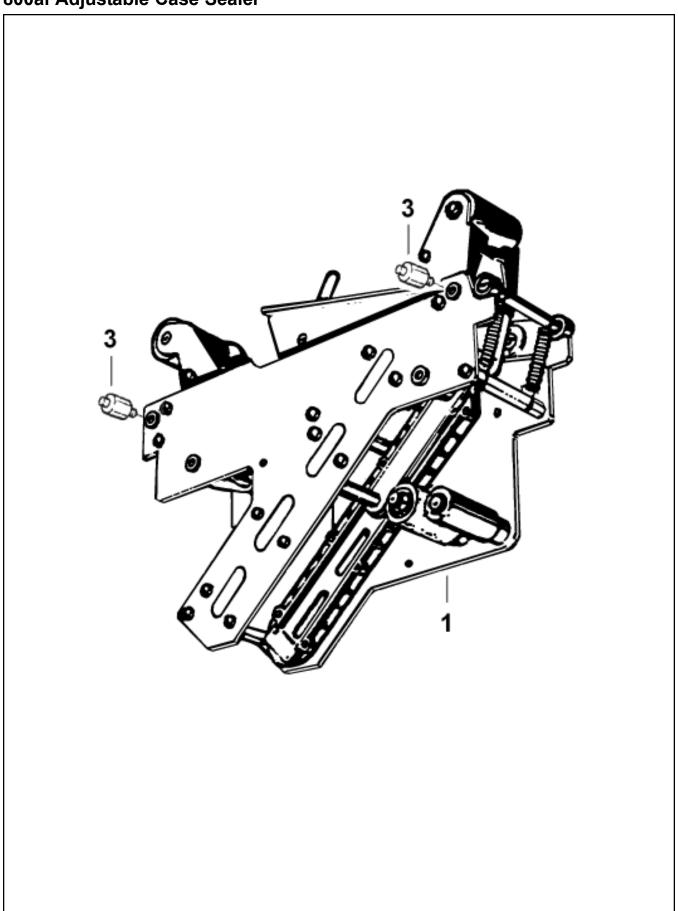
**Figure 10468** 

| Ref. No. | 3M Part No.    | Description                    |
|----------|----------------|--------------------------------|
| 10468-1  | 78-8134-2133-2 | Tape Drum Bracket Assy, Top    |
| 10468-2  | 78-8134-1934-4 | Tape Drum Bracket Assy, Bottom |
| 10468-3  | 78-8134-2334-6 | Bracket - Tape Drum, Upper     |
| 10468-4  | 78-8134-1936-9 | Bracket - Tape Drum, Lower     |
| 10468-5  | 78-8070-1568-6 | Cap - Bracket                  |
| 10468-6  | 78-8134-1937-7 | Shaft - Tape Drum              |
| 10468-7  | 78-8134-1938-5 | Nut - M18x1                    |
| 10468-8  | 78-8134-2335-3 | Tape Drum Assy - 2" wide       |
| 10468-9  | 78-8134-2336-1 | Tape Drum                      |
| 10468-10 | 78-8134-2337-9 | LeafSpring                     |
| 10468-11 | 78-8070-8337-0 | Screw - Self Tapping, 7SPx8    |
| 10468-12 | 78-8060-8172-1 | Washer - Friction              |
| 10468-13 | 78-8134-1939-3 | Washer - Tape Drum             |
| 10468-14 | 78-8134-1940-1 | Spring - Tape Drum             |
| 10468-15 | 78-8060-8201-8 | Nut - Self Locking, M10x1      |
| 10468-16 | 78-8060-8295-0 | Screw - Hex.Hd. M6x16          |
| 10468-17 | 78-8134-2128-2 | Spacer - Bracket               |
| 10468-18 | 78-8060-8312-3 | Washer -Flat, M6               |
| 10468-19 | 78-8060-8292-7 | Screw - Hex.Hd, M6x12          |
| 10468-20 | 78-8134-1942-7 | Tape Drum Assy - 2" wide       |
| 10468-21 | 78-8060-8315-6 | Washer - Flat, M10             |
| 10468-22 | 78-8134-2338-7 | Latch                          |



| Pos.    | Code           | Description   |
|---------|----------------|---|
| 10469-1 | 78-8060-8156-4 | AccuGlide SST, Upper, 2 Inch – Taping Head 18900 Type 18900 |
| 10469-3 | 78-8134-2325-4 | Spacer  |

**Note –** See Section II of this manual for taping head parts.



| Pos.    | Code           | Description  |
|---------|----------------|--|
| 10470-1 | 78-8060-8157-2 | AccuGlide SST, 2 Inch Upper Taping Head Type 18900 |
| 10470-3 | 78-8134-2324-7 | Spacer   |

**Note** – See Section II of this manual for taping head parts.

800af-s Adjustable Case Sealer

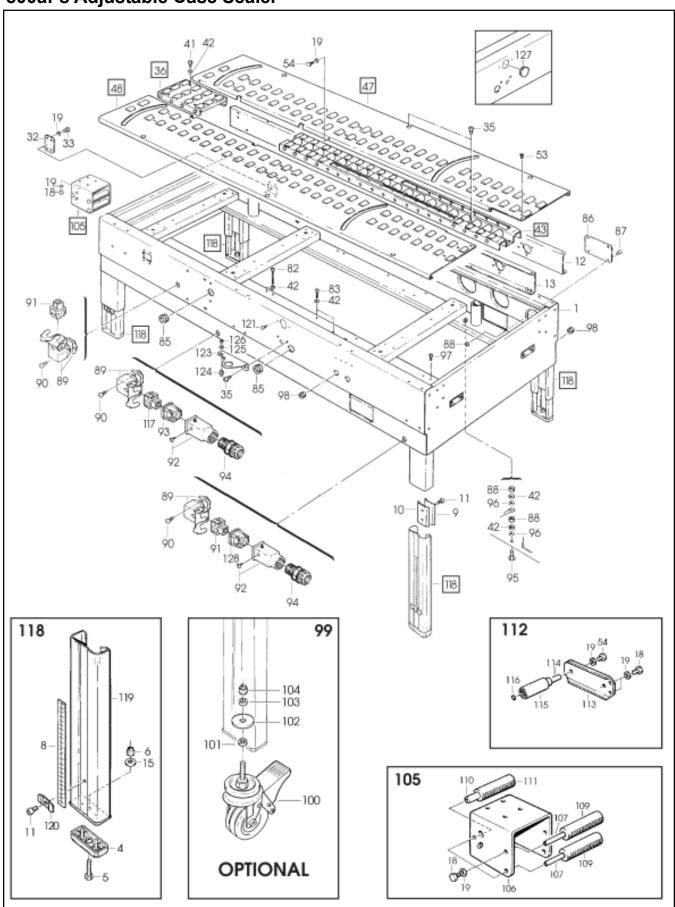


Figure 10471/1 of 4

**Figure 10471** (Page 1 of 4)

| Ref. No. | 3M Part No.    | Description             |
|----------|----------------|-------------------------|
| 10471-1  | 78-8134-2134-0 | Bed - Conveyor          |
| 10471-4  | 78-8060-8480-8 | Pad -Foot               |
| 10471-5  | 78-8134-1994-8 | Screw - Hex.Hd, M8x30   |
| 10471-6  | 78-8060-8320-6 | Nut - Self Locking, M8  |
| 10471-8  | 78-8060-8481-6 | Label - Height          |
| 10471-9  | 78-8060-8196-0 | Clamp - Outer           |
| 10471-10 | 78-8060-8195-2 | Clamp - Inner           |
| 10471-11 | 78-8060-8332-1 | Screw - Soc.Hd, M8x16   |
| 10471-12 | 78-8134-2135-7 | Center Frame - Right    |
| 10471-13 | 78-8134-2136-5 | Center Frame - Left     |
| 10471-14 | 78-8060-8307-3 | Screw - Soc.Hd, M8x20   |
| 10471-15 | 788060-8308-1  | Washer - Flat, M8       |
| 10471-16 | 78-8134-2138-1 | Spacer L=144            |
| 10471-18 | 78-8060-8295-0 | Screw - Hex.Hd. M6x16   |
| 10471-19 | 78-8060-8312-3 | Washer - Flat, M6       |
| 10471-20 | 78-8134-2138-1 | Bearing Support - Gate  |
| 10471-21 | 78-8134-2139-9 | Gate Assy               |
| 10471-22 | 78-8134-2140-7 | Spacer - Gate           |
| 10471-23 | 78-8134-2141-5 | Washer - Special, Gate  |
| 10471-24 | 78-8134-2142-3 | Support - Gate Cylinder |
| 10471-25 | 78-8134-2143-1 | Shaft - Cylinder, Gate  |
| 10471-26 | 78-8134-2050-8 | Ring - 8 DIN 6799       |
| 10471-27 | 78-8076-4757-9 | Bumper                  |

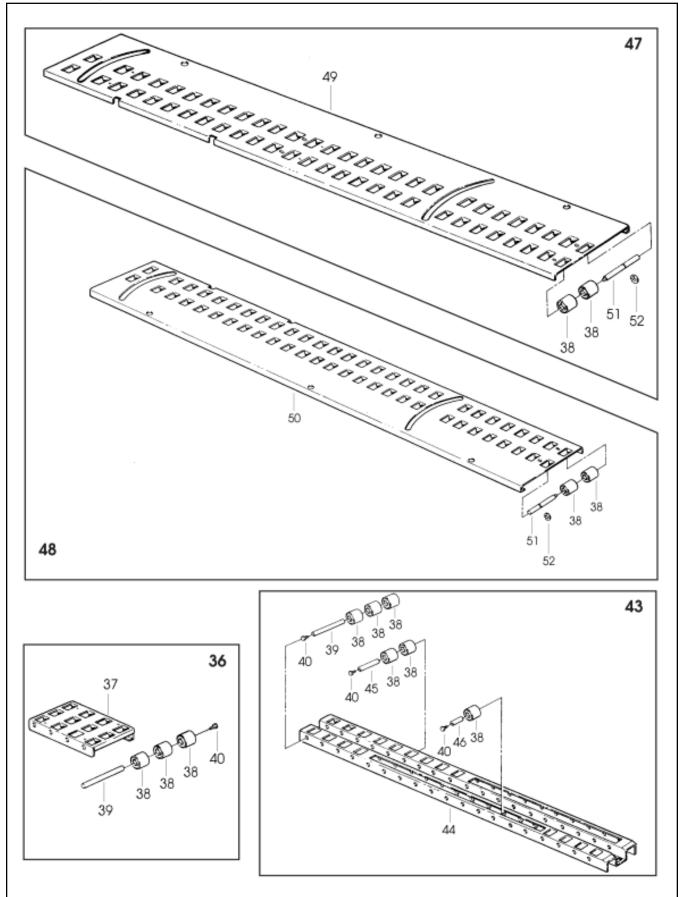


Figure 10471/2 of 4

**Figure 10471** (Page 2 of 4)

| Ref. No. | 3M Part No.    | Description               |
|----------|----------------|---------------------------|
| 10471-32 | 78-8134-2145-6 | Plate                     |
| 10471-33 | 78-8060-8204-2 | Screw - Hex.Hd, M6x12     |
| 10471-35 | 78-8060-8298-4 | Screw - Soc.Hd, M6x12     |
| 10471-36 | 78-8134-2145-6 | Conveyor Assy - Rear      |
| 10471-37 | 78-8134-2146-4 | Cover - Rear              |
| 10471-38 | 78-8060-7693-7 | Roller /32x38             |
| 10471-39 | 78-8060-8266-1 | Shaft - /8x128            |
| 10471-40 | 78-8060-8300-8 | Screw - Hex.Hd, M5x10     |
| 10471-41 | 78-8060-8306-5 | Screw - Soc.Hd, M5x10     |
| 10471-42 | 78-8060-8303-2 | Washer - Flat, M5         |
| 10471-43 | 78-8134-2147-2 | Conveyor Assy - Center    |
| 10471-44 | 78-8134-2148-0 | Conveyor - Center         |
| 10471-45 | 78-8134-2149-8 | Shaft - /8x83             |
| 10471-46 | 78-8134-2150-6 | Shaft - /8x43             |
| 10471-47 | 78-8134-2151-4 | Conveyor Assy - Right     |
| 10471-48 | 78-8134-2152-2 | Conveyor Assy - Left      |
| 10471-49 | 78-8134-2153-0 | Conveyor - Right          |
| 10471-50 | 78-8134-2154-8 | Conveyor - Left           |
| 10471-51 | 78-8134-2155-5 | Shaft - Roller            |
| 10471-52 | 78-8100-0791-0 | Ring - 7 DIN 6799         |
| 10471-53 | 78-8134-2156-3 | Screw - Flat Hd, M5x10    |
| 10471-54 | 78-8060-8292-7 | Screw - Hex.Hd, M6x12     |
| 10471-55 | 78-8134-2157-1 | Support Assy W/Cam - Gate |
| 10471-56 | 78-8134-2158-9 | Support Assy - Gate       |
| 10471-57 | 78-8134-2087-0 | Screw - Soc.Hd, M4x35     |

800af-s Adjustable Case Sealer

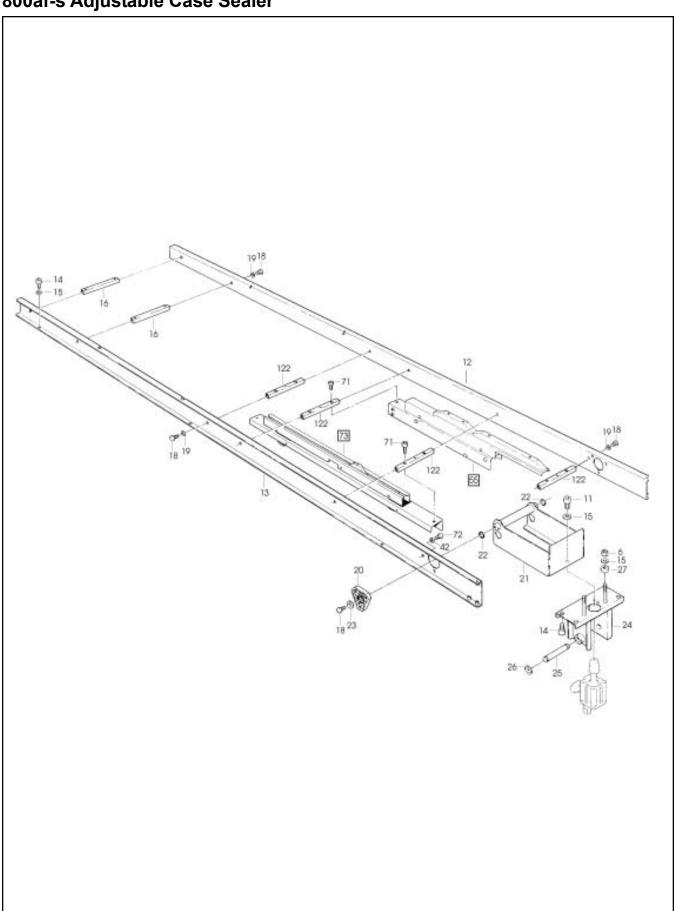


Figure 10471/3 of 4

**Figure 10471** (Page 3 of 4)

| Ref. No. | 3M Part No.    | Description                 |
|----------|----------------|-----------------------------|
| 10471-58 | 78-8134-2088-8 | Spacer - Valve Holder       |
| 10471-59 | 78-8134-2089-6 | Plate                       |
| 10471-60 | 78-8134-2084-7 | Pin - Spring Holder         |
| 10471-61 | 78-8134-2085-4 | Nut - Self Locking, M5      |
| 10471-62 | 78-8134-2086-2 | Spring                      |
| 10471-63 | 78-8055-0746-0 | Link - Front Actuator       |
| 10471-64 | 78-8055-0747-8 | Link - Rear Actuator        |
| 10471-65 | 78-8134-2090-4 | Screw - Self Tapping, 8Px13 |
| 10471-66 | 78-8134-2159-7 | Spacer - /8x26,5            |
| 10471-67 | 78-8134-2160-5 | Support Assy - Cam          |
| 10471-68 | 78-8076-4776-9 | Cam - Long                  |
| 10471-69 | 78-8076-4777-7 | Cam - Short                 |
| 10471-70 | 78-8134-1985-6 | Screw - Soc.Hd, M5x30       |
| 10471-71 | 78-8060-8290-1 | Screw - Soc.Hd, M6x25       |
| 10471-72 | 78-8134-1979-9 | Screw - Soc.Hd, M5x16       |
| 10471-73 | 78-8134-2161-3 | Actuator Assy               |
| 10471-74 | 78-8134-2162-1 | Support - Actuator          |
| 10471-75 | 78-8060-8321-4 | Nut - Self Locking, M4      |
| 10471-76 | 78-8060-8297-6 | Washer - Flat, M4           |
| 10471-77 | 78-8134-2163-9 | Guide - Right, Actuator     |
| 10471-78 | 78-8134-2164-7 | Guide - Left, Actuator      |
| 10471-79 | 78-8076-4782-7 | Actuator - Flap Folder      |
| 10471-80 | 78-8134-2165-4 | Plate - Actuator            |
| 10471-81 | 78-8134-2166-2 | Screw - Soc.Hd, M6x35       |
| 10471-82 | 78-8134-2167-0 | Screw - Soc.Hd, M5x70       |
| 10471-83 | 78-8134-2168-8 | Screw - Soc.Hd, M5x35       |
| 10471-85 | 78-8076-4702-5 | Grommet - Heyco SB1093-12   |
| 10471-86 | 78-8134-1999-7 | Cover - Switch              |

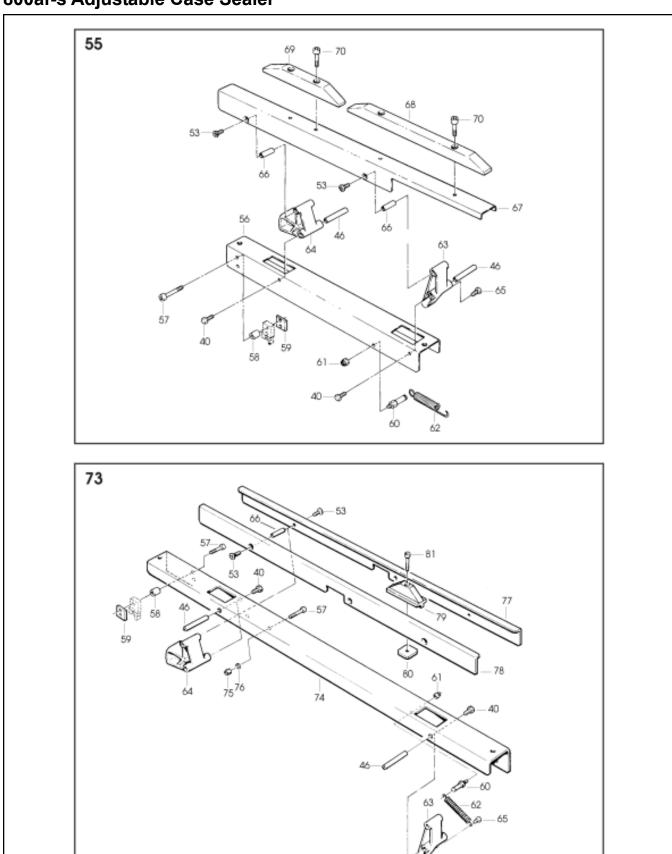
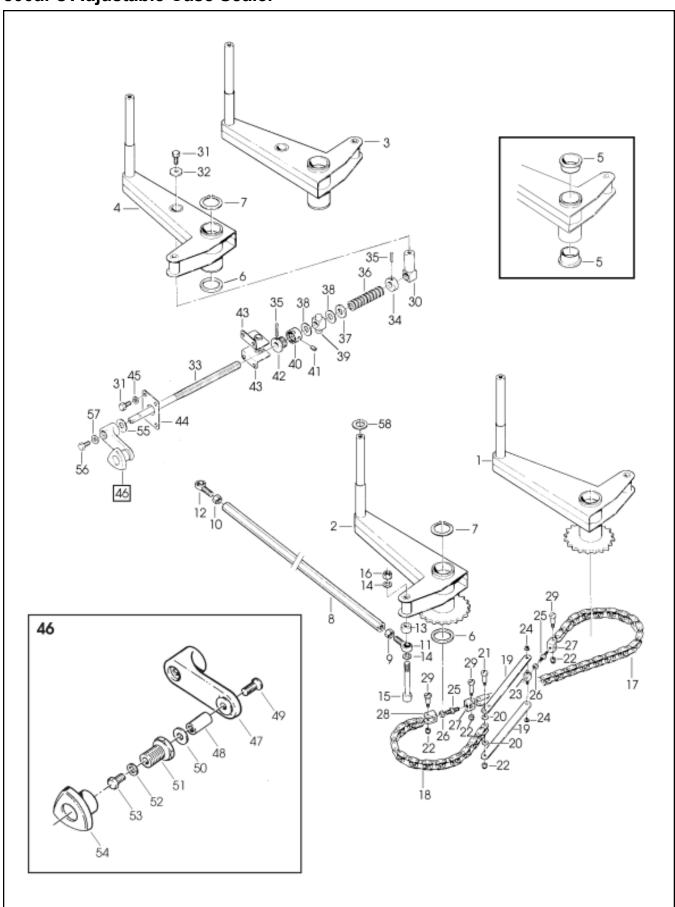


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# **Figure 10471** (Page 4 of 4)

| Ref. No.  | 3M Part No.    | Description                  |
|-----------|----------------|------------------------------|
| 10471-87  | 78-8134-2000-3 | Screw - M5x10                |
| 10471-88  | 78-8060-8293-5 | Nut - M5                     |
| 10471-89  | 78-8060-7876-8 | Cover - Plug, Lateral        |
| 10471-90  | 78-8134-2169-6 | Screw - Self Tapping, 6Px9,5 |
| 10471-91  | 78-8060-7873-5 | Plug - Female                |
| 10471-92  | 78-8060-7877-6 | Plug - Housing, Vertical     |
| 10471-93  | 78-8060-7591-3 | Plug - Male                  |
| 10471-94  | 78-8076-4532-6 | Cord Grip                    |
| 10471-95  | 78-8134-1974-0 | Screw - Hex.Hd, M5x20        |
| 10471-96  | 78-8060-8401-4 | Washer - Special, Gate       |
| 10471-97  | 78-8134-2170-4 | Screw - Self Tapping, 6Px30  |
| 10471-98  | 78-8060-7758-8 | Fairlead /20                 |
| 10471-99  | 78-8134-2171-2 | Caster Assy /100             |
| 10471-100 | 78-8134-2172-0 | Caster /100                  |
| 10471-101 | 78-8060-8405-5 | Spacer - Caster              |
| 10471-102 | 78-8060-8406-3 | Washer - Special, Gate       |
| 10471-103 | 78-8060-8304-0 | Washer - Flat, M12           |
| 10471-104 | 78-8060-8407-1 | Nut - Self Locking, M12      |
| 10471-105 | 78-8134-2173-8 | Support Assy - Tape Roll     |
| 10471-106 | 78-8134-2174-6 | Support - Tape Roll Bracket  |
| 10471-107 | 78-8134-2175-3 | Shaft - Roller               |
| 10471-109 | 78-8076-5030-0 | Roller - Knurled, L=114 mm   |
| 10471-110 | 78-8134-2176-1 | Shaft - Roller               |
| 10471-111 | 78-8076-5032-6 | Roller - Knurled L=110,5 mm  |
| 10471-112 | 78-8134-2177-9 | Bracket Assy                 |
| 10471-113 | 78-8134-2178-7 | Bracket                      |
| 10471-114 | 78-8114-4718-0 | Shaft                        |
| 10471-115 | 78-8114-4719-8 | Roller                       |
| 10471-116 | 78-8060-8203-4 | Ring - Retaining 10 DIN 6799 |
| 10471-117 | 78-8060-7592-1 | Socket                       |
| 10471-118 | 78-8134-1992-2 | Leg Assy - Inner             |
| 10471-119 | 78-8134-1993-0 | Leg - Inner                  |
| 10471-120 | 78-8134-1995-5 | Stop - Leg                   |
| 10471-121 | 78-8134-2009-4 | Screw - Special, M5x16       |
| 10471-122 | 78-8134-2179-5 | Spacer                       |
| 10471-123 | 78-8134-2180-3 | Plate - L/H                  |
| 10471-124 | 78-8134-2014-4 | Shaft - Valve                |
| 10471-125 | 78-8060-8296-8 | Washer - Triple, M6          |
| 10471-126 | 78-8060-8318-0 | Nut - Self Locking, M6       |
| 10471-127 | 78-8076-4536-7 | Сар                          |
| 10471-128 | 78-8060-7875-0 | Plug - Male                  |



**Figure 10474** 

| Ref. No.             | 3M Part No.                      | Description                                 |
|----------------------|----------------------------------|---|
| 10474-1              | 78-8134-2233-0                   | Arm Assy - Front, R/H                       |
| 10474-2              | 78-8134-2234-8                   | Arm Assy - Front, L/H                       |
| 10474-3              | 78-8134-2235-5                   | Arm Assy - Rear, R/H                        |
| 10474-4              | 78-8134-2236-3                   | Arm Assy - Rear, L/H                        |
| 10474-5              | 78-8076-4791-8                   | Bushing                                     |
| 10474-6              | 78-8060-7534-3                   | Washer - Nylon                              |
| 10474-7              | 78-8134-2237-1                   | Ring - Lock                                 |
| 10474-8              | 78-8134-2238-9                   | Bar - Coupling                              |
| 10474-9              | 78-8134-2239-7                   | Nut - Right, M10                            |
| 10474-10             | 78-8134-2240-5                   | Nut - Left, M10                             |
| 10474-11             | 78-8134-2241-3                   | Joint - Ball, KA-10-D                       |
| 10474-12<br>10474-13 | 78-8134-2242-1<br>78-8134-2243-9 | Joint - Ball, KAL-10-D<br>Spacer            |
| 10474-14             | 78-8060-8315-6                   | Washer - Flat, M10                          |
| 10474-15             | 78-8134-2244-7                   | Screw - Soc.Hd, M10x80                      |
| 10474-16             | 78-8060-8328-9                   | Nut - Self Locking, M10                     |
| 10474-17             | 78-8134-2245-4                   | Chain, 3/8", 59 pitch                       |
| 10474-18             | 78-8134-2246-2                   | Chain - 3/8", 47 pitch                      |
| 10474-19             | 78-8134-2053-2                   | Link - Chain                                |
| 10474-20             | 78-8134-2058-1                   | Washer - Special, /3-10x3                   |
| 10474-21             | 78-8134-2057-3                   | Screw - Special, M3x25                      |
| 10474-22             | 78-8134-2012-8                   | Nut - Self Locking, M3                      |
| 10474-23             | 78-8134-2059-9                   | Block - Chain                               |
| 10474-24             | 78-8134-2060-7                   | E-Ring                                      |
| 10474-25             | 78-8134-2061-5                   | Rod - Chain                                 |
| 10474-26             | 78-8060-8288-5                   | Nut - M6                                    |
| 10474-27             | 78-8134-2055-7                   | Connector - Chain, L/H                      |
| 10474-28             | 78-8134-2054-0                   | Connector - Chain, R/H                      |
| 10474-29             | 78-8134-2056-5                   | Screw - Special, M3x20                      |
| 10474-30<br>10474-31 | 78-8134-2247-0<br>78-8134-2030-0 | Nut - Arm<br>Screw - Special, Hex.Hd, M6x16 |
| 10474-31             | 78-8134-2248-8                   | Washer - Special, Gate                      |
| 10474-32             | 78-8134-2249-6                   | Screw - Centering                           |
| 10474-34             | 78-8134-2250-4                   | Bushing - Dowel                             |
| 10474-35             | 78-8060-8343-8                   | Pin   |
| 10474-36             | 78-8134-2251-2                   | Washer - Belleville                         |
| 10474-37             | 78-8134-2252-0                   | Washer - Special                            |
| 10474-38             | 78-8060-8036-8                   | Washer - Nylon                              |
| 10474-39             | 78-8060-8436-0                   | Nut - Plastic                               |
| 10474-40             | 78-8134-2253-8                   | Ring - Nut                                  |
| 10474-41             | 78-8134-2254-6                   | Set Screw - M5x8                            |
| 10474-42             | 78-8134-2255-3                   | Bushing - Threaded                          |
| 10474-43             | 78-8134-2256-1                   | Plate W/Bushing                             |
| 10474-44             | 78-8134-2257-9                   | Plate Western Flat MC                       |
| 10474-45             | 78-8060-8312-3                   | Washer -Flat, M6                            |
| 10474-46             | 78-81341923-7                    | Crank Assy                                  |
| 10474-47<br>10474-48 | 78-8076-5422-9<br>78-8134-1924-5 | Crank<br>Shaft - Crank                      |
| 10474-48<br>10474-49 | 78-8060-8327-1                   | Screw - Flat Hd, M5x16                      |
| 10474-50             | 78-8070-1510-8                   | Washer - Nylon                              |
| 10474-51             | 78-8134-1925-2                   | Bushing                                     |
| 10474-52             | 78-8060-8297-6                   | Washer - Flat, M4                           |
| 10474-53             | 78-8100-0905-6                   | Screw - Hex.Hd, M4x10                       |
| 10474-54             | 78-8070-1512-4                   | Knob  |
| 10474-55             | 78-8070-1548-8                   | Washer - Nylon                              |
| 10474-56             | 78-8060-8295-0                   | Screw - Hex.Hd, M6x16                       |
| 10474-57             | 78-8134-1926-0                   | Washer - Crank                              |
| 10474-58             | 78-8134-2258-7                   | Washer                                      |
| .517 7 55            | . 0 0107 2200-1                  |   |

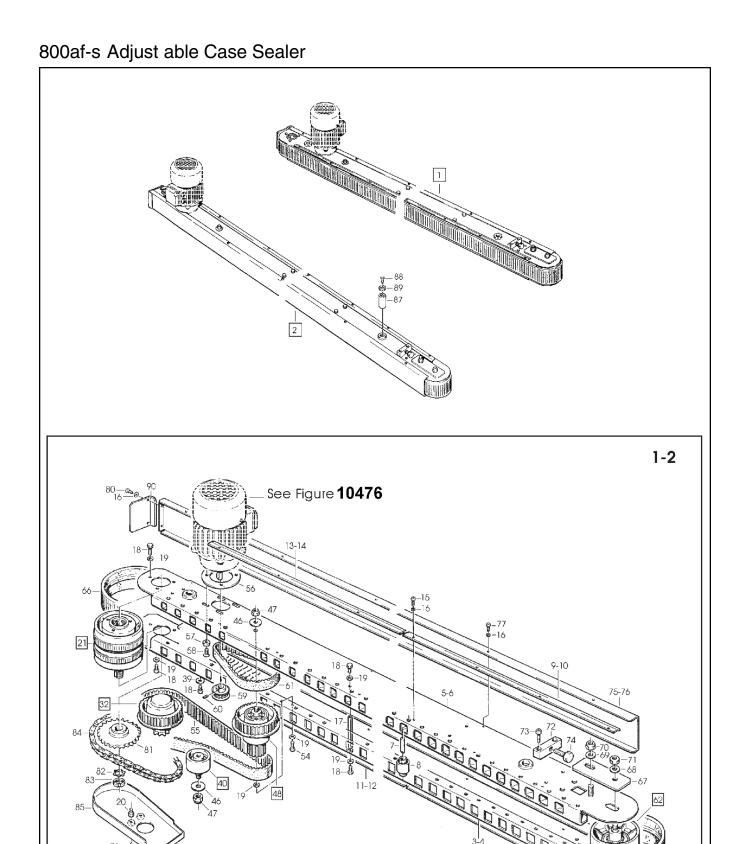


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### **Figure 10472** (Page 1 of 2)

| Ref. No. | 3M Part No.    | Description                   |
|----------|----------------|-------------------------------|
| 10472-1  | 78-8134-2181-1 | Drive Assy - Right, W/O Motor |
| 10472-2  | 78-8134-2182-9 | Drive Assy - Left, W/O Motor  |
| 10472-3  | 78-8134-2183-7 | Guide - Lower, Right          |
| 10472-4  | 78-8134-2184-5 | Guide - Lower, Left           |
| 10472-5  | 78-8134-2185-2 | Guide - Upper, Right          |
| 10472-6  | 78-8134-2186-0 | Guide - Upper, Left           |
| 10472-7  | 78-8134-2187-8 | Pin - Roller                  |
| 10472-8  | 78-8060-7996-4 | Roller                        |
| 10472-9  | 78-8134-2188-6 | Plate - Rear, Right           |
| 10472-10 | 78-8134-2189-4 | Plate - Rear, Left            |
| 10472-11 | 78-8134-2190-2 | Plate - Right                 |
| 10472-12 | 78-8134-2191-0 | Plate - Left                  |
| 10472-13 | 78-8134-2192-8 | Plate - Right, Straight       |
| 10472-14 | 78-8134-2193-6 | Plate - Left, Straight        |
| 10472-15 | 78-8134-2194-4 | Screw - Pan Hd, M4x12         |
| 10472-16 | 78-8060-8297-6 | Washer - Flat, M4             |
| 10472-17 | 78-8134-2195-1 | Spacer - Hexagonal            |
| 10472-18 | 78-8060-8204-2 | Screw - Special, M6x12        |
| 10472-19 | 78-8060-8312-3 | Washer - Flat, M6             |
| 10472-20 | 78-8134-2196-9 | Screw - Special, M6           |
| 10472-21 | 78-8134-2197-7 | Drive Pulley Assy             |
| 10472-22 | 78-8060-8371-9 | Pulley Assy - Drive           |
| 10472-23 | 78-8052-6713-1 | Ring - Pulley                 |
| 10472-24 | 78-8134-2198-5 | Shaft - Pulley                |
| 10472-25 | 78-8060-8244-8 | Washer - /20,5                |
| 10472-26 | 78-8134-2199-3 | Nut - Special, M18x1          |
| 10472-27 | 78-8134-2200-9 | Flange Assy                   |
| 10472-28 | 78-8060-8313-1 | Key - 5x5x30                  |
| 10472-29 | 78-8060-8269-5 | Washer - 5,5/20x4             |
| 10472-30 | 78-8060-8330-5 | Screw - Flat Hd, M5x12        |
| 10472-31 | 78-8134-2201-7 | Key - 5x5x12                  |
| 10472-32 | 78-8134-2202-5 | Drive Pulley Assy - Keyed     |
| 10472-33 | 78-8134-2203-3 | Pulley - Keyed                |
| 10472-34 | 78-8134-2204-1 | Support Pulley, Keyed         |
| 10472-35 | 26-1000-6036-2 | Bearing - 6003-2RS            |
| 10472-36 | 78-8134-2206-6 | Spacer                        |
| 10472-37 | 78-8060-8336-2 | Key - 4x4x10                  |
| 10472-38 | 78-8134-2207-4 | Sprocket - 3/8", 11 teeth     |
| 10472-39 | 78-8060-8296-8 | Washer - Triple, M6           |
| 10472-40 | 78-8134-2208-2 | Jockey Pulley Assy            |
| 10472-41 | 78-8134-2209-0 | Pulley - Jockey               |
| 10472-42 | 78-8134-2210-8 | Pin - Jockey Pulley           |
| 10472-43 | 78-8060-8008-7 | Bearing - 6004-2RS            |
| 10472-44 | 78-8060-8010-3 | Ring - Shaft, 42 DIN 472      |
| 10472-45 | 78-8017-9061-5 | Ring - Shaft, 20 DIN 471      |

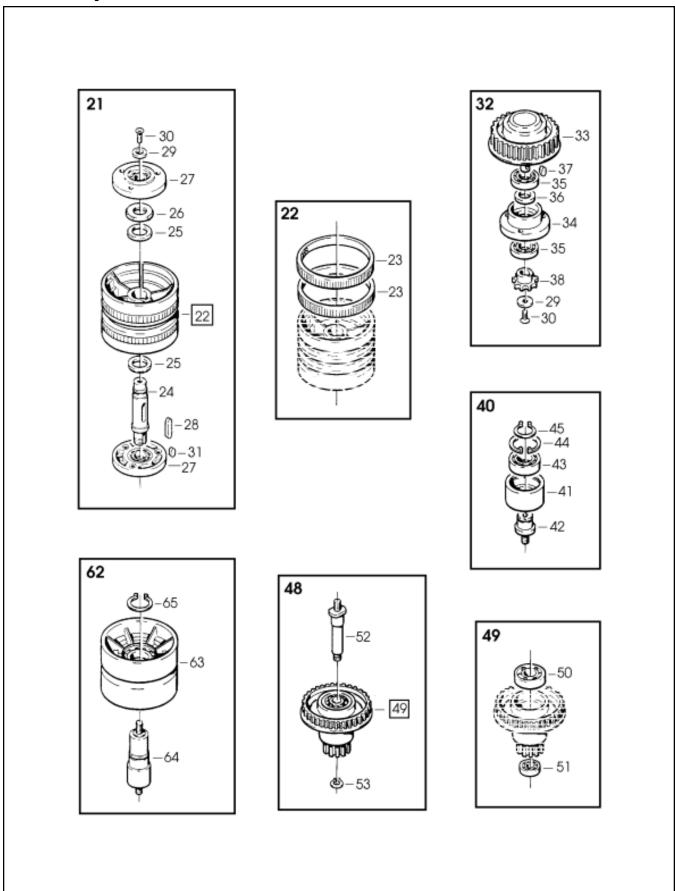
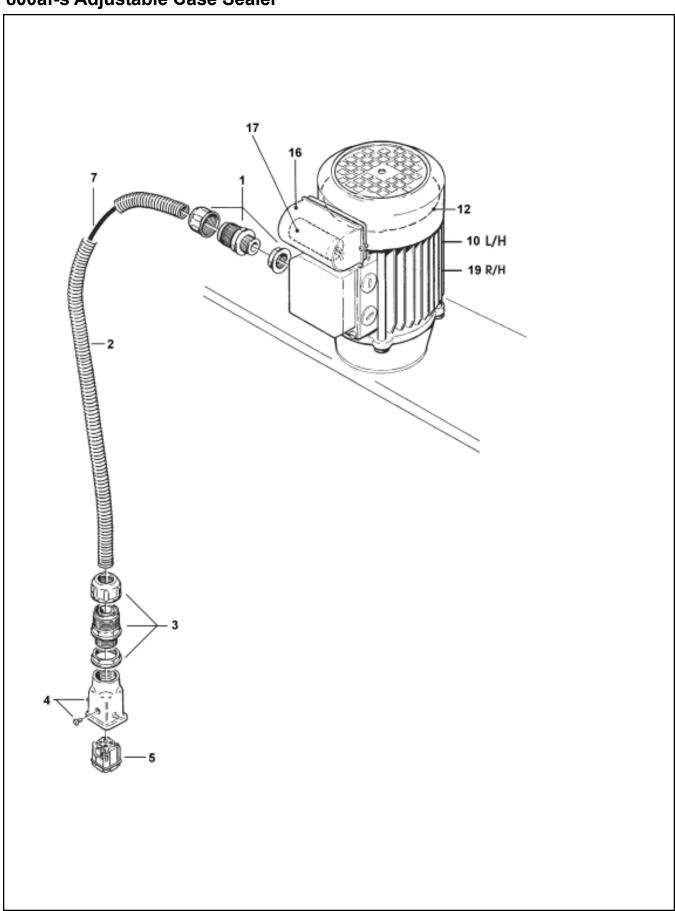


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### **Figure 10472** (Page 2 of 2)

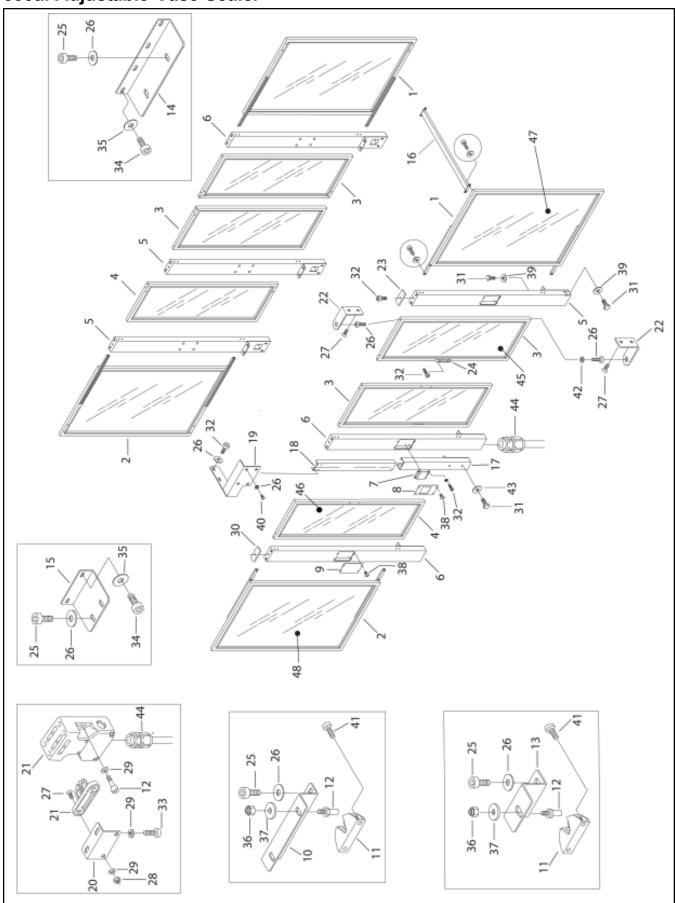
| Ref. No. | 3M Part No.    | Description                 |
|----------|----------------|-----------------------------|
| 10472-46 | 78-8060-8335-4 | Washer - Triple, M8         |
| 10472-47 | 78-8060-8320-6 | Nut - Self Locking, M8      |
| 10472-48 | 78-8134-2212-4 | Wrap Pulley Assy            |
| 10472-49 | 78-8076-5106-8 | Idler Pulley Assy           |
| 10472-50 | 78-8023-2544-5 | Bearing - 6203-2RS          |
| 10472-51 | 78-8023-2410-9 | Bearing - 6000-2RS          |
| 10472-52 | 78-8134-2213-2 | Shaft - Wrap Pulley         |
| 10472-53 | 78-8060-8314-9 | Ring - 10 DIN 471           |
| 10472-54 | 78-8060-8295-0 | Screw - Hex.Hd, M6x16       |
| 10472-55 | 78-8060-8013-7 | Belt - Timing, 210L075      |
| 10472-56 | 78-8094-6050-0 | Spacer - Motor              |
| 10472-57 | 78-8134-2214-0 | Washer - Motor              |
| 10472-58 | 78-8060-8333-9 | Screw - Flat Hd, M5x20      |
| 10472-59 | 78-8134-2215-7 | Pulley-17XL050              |
| 10472-60 | 78-8060-8326-3 | Set Screw - M5x6            |
| 10472-61 | 78-8060-8016-0 | Belt-Timing, 190XL050       |
| 10472-62 | 78-8134-2216-5 | Idler Roller Assy           |
| 10472-63 | 78-8052-6710-7 | Roller - Idler              |
| 10472-64 | 78-8134-2217-3 | Shaft - Roller              |
| 10472-65 | 78-8134-2218-1 | Ring - Shaft, 25 DIN 471    |
| 10472-66 | 78-8076-4865-0 | Belt - Box Drive            |
| 10472-67 | 78-8134-2219-9 | Tensioning - Belt           |
| 10472-68 | 78-8060-8308-1 | Washer - Flat, M8           |
| 10472-69 | 78-8060-8315-6 | Washer - Flat, M10          |
| 10472-70 | 78-8060-8328-9 | Nut - Self Locking, M10     |
| 10472-71 | 78-8060-8289-3 | Nut - M8                    |
| 10472-72 | 78-8134-2220-7 | Block - Belt                |
| 10472-73 | 78-8060-8311-5 | Screw - Soc.Hd, M6x20       |
| 10472-74 | 78-8134-2221-5 | Screw - Belt Adjustment     |
| 10472-75 | 78-8134-2222-3 | Cover-Drive, Right          |
| 10472-76 | 78-8134-2223-1 | Cover - Drive, Left         |
| 10472-77 | 78-8060-8337-0 | Screw - Self Tapping, 7SPx8 |
| 10472-80 | 78-8134-2090-4 | Screw - Self Tapping, 8Px13 |
| 10472-81 | 78-8134-2224-9 | Sprocket - 3/8", 28 teeth   |
| 10472-82 | 78-8134-2225-6 | Tab Washer                  |
| 10472-83 | 78-8134-2226-4 | Washer - Centering          |
| 10472-84 | 78-8134-2227-2 | Chain - 3/8" Pitch L=50     |
| 10472-85 | 78-8076-5258-7 | Cover-Chain                 |
| 10472-86 | 78-8060-8306-5 | Screw - Soc.Hd, M5x10       |
| 10472-87 | 78-8134-2228-0 | Spacer - Drive              |
| 10472-88 | 78-8060-8299-2 | Screw - Flat Hd, M6x16      |
| 10472-89 | 78-8060-8243-0 | Washer - Special            |
| 10472-90 | 78-8134-2229-8 | Guard - Belt                |

800af-s Adjustable Case Sealer



**Figure 10476** 

| Ref. No. | Code        | Description                         |
|----------|-------------|-------------------------------------|
| 10476-1  | 78806076317 | Connector 3/8"                      |
| 10476-2  | 78807652595 | Sleeving - /12, 650mm               |
| 10476-3  | 78806076267 | Connector PG11                      |
| 10476-4  | 78806078776 | Housing - plug, vertical            |
| 10476-5  | 78806078750 | Plug - male                         |
| 10476-7  | 78809104330 | Cable 3x1,5 - 5mt, 1ph              |
| 10476-10 | 78813422611 | Motor - 100/115V, 50/60Hz, 1ph, L/H |
| 10476-12 | 78813422637 | Fan - motor                         |
| 10476-16 | 78811449178 | Housing - capacitor                 |
| 10476-17 | 78811449202 | Capacitor - 25mF, 250V              |
| 10476-19 | 78813423288 | Motor - 100/115V, 50/60Hz, 1ph, R/H |



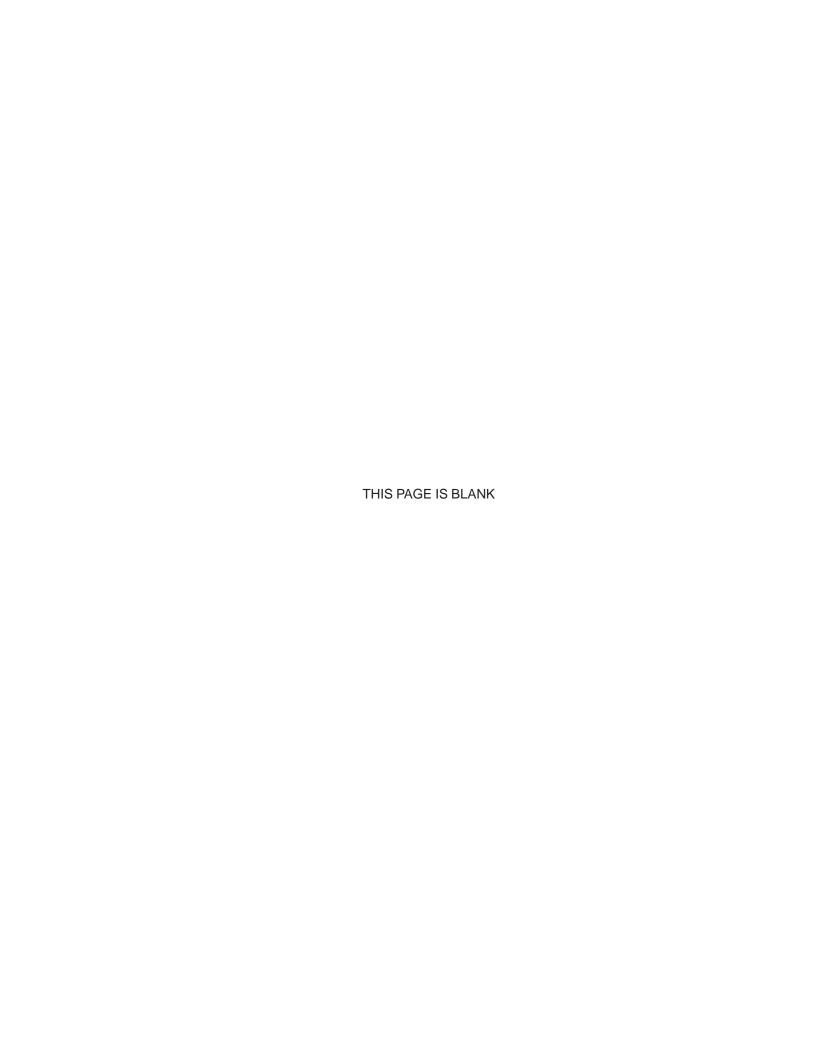
**Figure 10475** 

# **Figure 10475** (Page 1 of 2)

| Ref. No. | 3M Part No.    | Description              |
|----------|----------------|--------------------------|
| 10475-1  | 78-8134-2296-7 | Panel Assembly - Infeed  |
| 10475-2  | 78-8134-2297-5 | Panel Assembly - Outfeed |
| 10475-3  | 78-8134-2298-5 | Panel Assembly - Front   |
| 10475-4  | 78-8134-2299-1 | Panel Assembly – Rear    |
| 10475-5  | 78-8134-2300-7 | Jamb - Left              |
| 10475-6  | 78-8134-2301-5 | Jamb – Right             |
| 10475-7  | 78-8134-2302-3 | Support - E Stop         |
| 10475-8  | 78-8134-2303-1 | Cover                    |
| 10475-9  | 78-8134-2304-9 | Cover                    |
| 10475-10 | 78-8134-2305-6 | Bracket                  |
| 10475-11 | 78-8134-2306-4 | Stop - Door              |
| 10475-12 | 78-8134-2083-9 | Screw - Soc.hd, M5x20    |
| 10475-13 | 78-8134-2307-2 | Bracket - Rear           |
| 10475-14 | 78-8134-2308-0 | Bracket - Front          |
| 10475-15 | 26-8134-2309-8 | Bracket - Rear Panel     |
| 10475-16 | 26-8134-2310-6 | Cross Bar                |
| 10475-17 | 78-8134-2311-4 | Jamb                     |
| 10475-18 | 78-8134-2312-2 | Guard                    |
| 10475-19 | 78-8134-2313-0 | Bracket - Guard          |
| 10475-20 | 78-8134-2314-8 | Bracket - Switch         |
| 10475-21 | 26-8076-4929-4 | Security Switch          |
| 10475-22 | 78-8134-2315-5 | Hinge                    |
| 10475-23 | 78-8076-4512-8 | Cap - Left               |
| 10475-24 | 78-8134-2316-3 | Handle                   |

# **Figure 10475** (Page 2 of 2)

| Ref. No. | 3M Part No.    | Description            |
|----------|----------------|------------------------|
| 10475 25 | 70 0060 0200 4 | Serous See Hd M6v12    |
| 10475-25 | 78-8060-8298-4 | Screw - Soc.Hd, M6x12  |
| 10475-26 | 78-8060-8312-3 | Washer - Flat, M6      |
| 10475-27 | 78-8060-8330-5 | Screw - Flat Hd, M5x12 |
| 10475-28 | 78-8134-2085-4 | Nut - Self Locking, M5 |
| 10475-29 | 78-8060-8303-2 | Washer - Plain, M5     |
| 10475-30 | 78-8076-4511-0 | Cap - Right            |
| 10475-31 | 78-8060-8319-8 | Screw - Hex.Hd, M8x20  |
| 10475-32 | 78-8060-8311-5 | Screw - Soc.Hd, M6x20  |
| 10475-33 | 78-8060-8322-2 | Screw - Soc.Hd, M5x12  |
| 10475-34 | 78-8134-2317-1 | Screw - Soc.Hd, M4x15  |
| 10475-35 | 78-8134-2318-9 | Washer - Triple, M4    |
| 10475-36 | 78-8060-8318-0 | Nut - Self Locking, M6 |
| 10475-37 | 78-8060-8296-8 | Washer - Triple, M6    |
| 10475-38 | 78-8060-8325-5 | Screw - Hex.Hd, M5x12  |
| 10475-39 | 78-8060-8308-1 | Washer - Flat, M8      |
| 10475-40 | 78-8060-8331-3 | Screw - Soc.Hd, M6x16  |
| 10475-41 | 78-8134-2319-7 | Screw - Soc.Hd, M4x10  |
| 10475-42 | 78-8017-9474-8 | Washer - Nylon, 15 mm  |
| 10475-43 | 78-8060-8335-4 | Washer - Triple, M8    |
| 10475-44 | 78-8076-4532-6 | Cord Grip              |
| 10475-45 | 78-8134-2320-5 | Panel - Front Door     |
| 10475-46 | 78-8134-2321-3 | Panel - Rear Door      |
| 10475-47 | 78-8134-2322-1 | Panel-Infeed           |
| 10475-48 | 78-8134-2323-9 | Panel - Outfeed        |



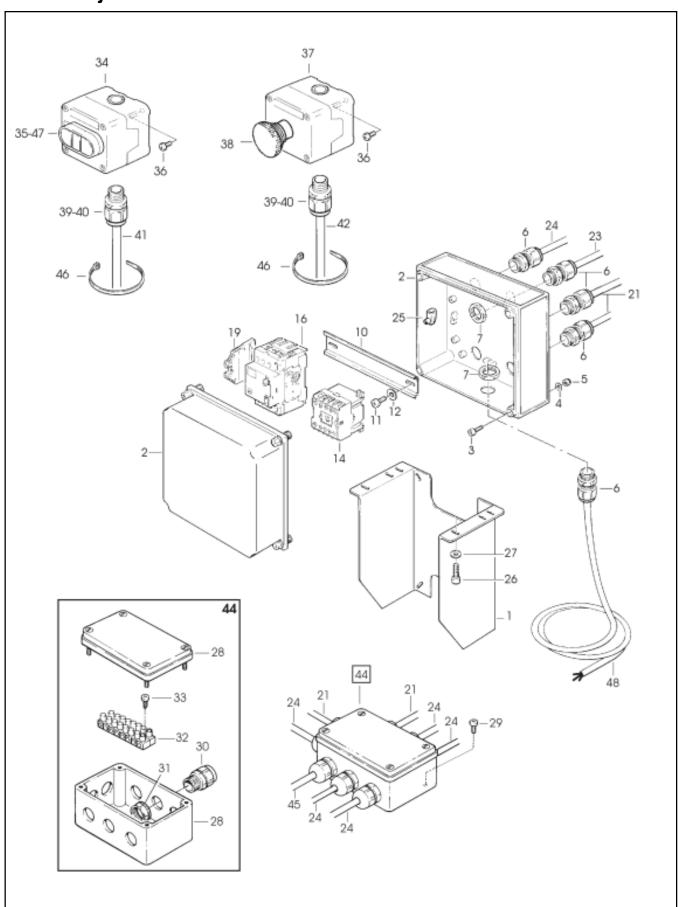
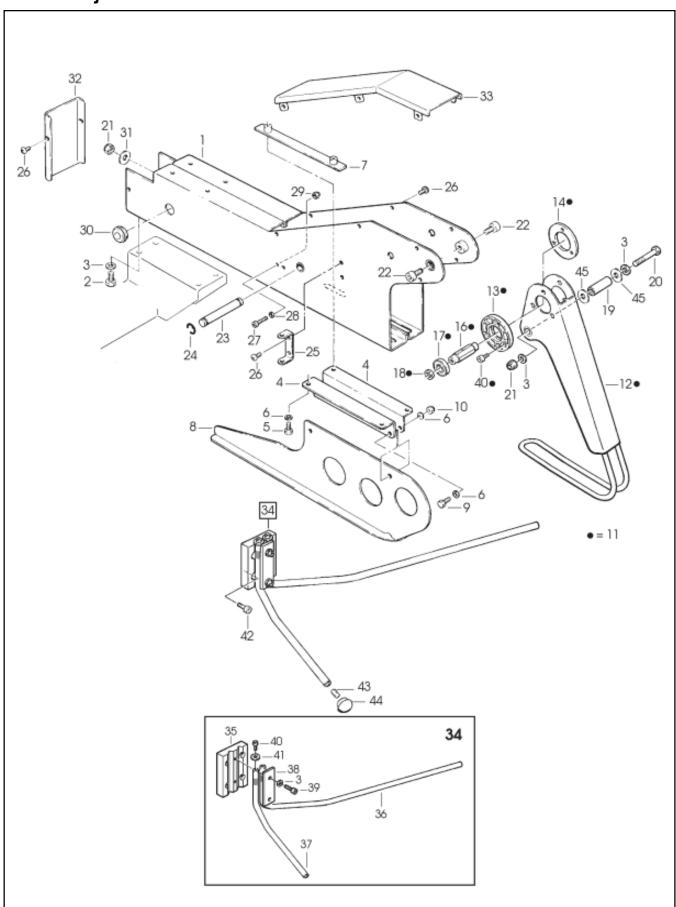


Figure 10478

| Ref. No. | 3M Part No.    | Description                             |
|----------|----------------|---|
| 10478-1  | 78-8134-2001-1 | Support - Electric Box                  |
| 10478-2  | 78-8113-6759-4 | Electric Box                            |
| 10478-3  | 78-8134-2291-8 | Screw - Soc.Hd, M4x20                   |
| 10478-4  | 78-8060-8297-6 | Washer - Flat, M4                       |
| 10478-5  | 78-8060-8321-4 | Nut - M4                                |
| 10478-6  | 78-8076-4715-7 | Cord Grip                               |
| 10478-7  | 78-8076-5211-6 | Set Nut                                 |
| 10478-10 | 78-8094-6382-7 | Guide - Mounting                        |
| 10478-11 | 78-8028-8208-0 | Screw - Self Tapping, 6Px9,5            |
| 10478-12 | 78-8017-9018-5 | Washer - Triple, M4                     |
| 10478-14 | 78-8094-6383-5 | Contactor - Allen Bradley 10E 110V 60Hz |
| 10478-16 | 78-8076-5378-3 | Switch - 1.6-2.5 A.                     |
| 10478-19 | 78-8114-4890-7 | Clamp                                   |
| 10478-21 | 78-8091-0433-0 | Cable - 3x1.5, 1ph, 5mt                 |
| 10478-23 | 78-8076-5176-1 | Cable - 3x0.75, 5mt                     |
| 10478-24 | 78-8076-5273-6 | Cable - 3x1, 5mt                        |
| 10478-25 | 78-8076-4602-7 | Terminal                                |
| 10478-26 | 78-8060-8331-3 | Screw - Soc.Hd, M6x16                   |
| 10478-27 | 78-8060-8312-3 | Washer - Flat, M6                       |
| 10478-28 | 78-8076-4881-7 | Pull Box                                |
| 10478-29 | 78-8134-2000-3 | Screw - M5x10                           |
| 10478-30 | 78-8076-4532-6 | Cord Grip                               |
| 10478-31 | 78-8076-4645-6 | Lock Nut                                |
| 10478-32 | 78-8076-4968-2 | Terminal                                |
| 10478-33 | 78-8134-2292-6 | Screw - Self Tapping, 4.2x19            |
| 10478-34 | 78-8134-2293-4 | Support - ON/OFF                        |
| 10478-35 | 78-8094-6386-8 | Switch - ON/OFF                         |
| 10478-36 | 78-8100-0907-2 | Screw - Pan, M4x16                      |
| 10478-37 | 78-8134-2293-4 | Support - E-Stop                        |
| 10478-38 | 26-1014-5845-8 | E-stop - /40 W/Latch+Contact            |
| 10478-39 | 78-8060-8327-1 | Screw - Flat Hd, M5x16                  |
| 10478-40 | 78-8060-8401-4 | Washer - Special, M5                    |
| 10478-41 | 78-8060-8303-2 | Washer - Flat, M5                       |
| 10478-42 | 78-8060-8293-5 | Nut - M5                                |
| 10478-44 | 78-8076-5275-1 | Pull Box Assy - 1ph                     |
| 10478-45 | 78-8100-0832-2 | Wire - 3x1, 5mt                         |
| 10478-46 | 78-8060-8029-3 | Clamp                                   |
| 10478-47 | 78-8134-2340-3 | Cover - On/off switch                   |
| 10478-48 | 78-8028-7909-4 | Power Cord – U.S.A.                     |



**Figure 10477** 

| Ref. No. | 3M Part No.    | Description                 |
|----------|----------------|-----------------------------|
| 10477-1  | 78-8134-2266-0 | Support - Front Flap Folder |
| 10477-2  | 78-8060-8302-4 | Screw - Hex.Hd, M8x25       |
| 10477-3  | 78-8060-8308-1 | Washer - Flat, M8           |
| 10477-4  | 78-8134-2267-8 | Plate - Box Guide           |
| 10477-5  | 78-8060-8311-5 | Screw - Soc.Hd, M6x20       |
| 10477-6  | 78-8060-8312-3 | Washer - Fat, M6            |
| 10477-7  | 78-8134-2268-6 | Strap                       |
| 10477-8  | 78-8134-2269-4 | Flap Folder - Front         |
| 10477-9  | 78-8060-8295-0 | Screw - Hex.Hd, M6x16       |
| 10477-10 | 78-8060-8318-0 | Nut - Self Locking, M6      |
| 10477-11 | 78-8134-2270-2 | Flap Folder Assy - Rear     |
| 10477-12 | 78-8134-2271-0 | Flap Folder - Rear          |
| 10477-13 | 78-8134-2272-8 | Support - Bearing           |
| 10477-14 | 78-8134-2273-6 | Washer - Support            |
| 10477-16 | 78-8134-2274-4 | Shaft - Support             |
| 10477-17 | 78-8134-2106-8 | Bearing - 6002-2S           |
| 10477-18 | 78-8134-2275-1 | Spacer - Bearing            |
| 10477-19 | 78-8134-2276-9 | Spacer - Cylinder           |
| 10477-20 | 78-8134-2277-7 | Screw - Hex.Hd, M8x60       |
| 10477-21 | 78-8060-8320-6 | Nut - Self Locking, M8      |
| 10477-22 | 78-8060-8307-3 | Screw - Soc.Hd, M8x20       |
| 10477-23 | 78-8134-2278-5 | Pin - Air Cylinder          |
| 10477-24 | 78-8134-2279-3 | Ring - 8 DIN 6799           |
| 10477-25 | 78-8134-2280-1 | Holder                      |
| 10477-26 | 78-8134-2000-3 | Screw - M5x10               |
| 10477-27 | 78-8134-2087-0 | Screw - Soc. Hd, M4x35      |
| 10477-28 | 78-8060-8297-6 | Washer - Flat, M4           |
| 10477-29 | 78-8060-8321-4 | Nut - Self Locking, M4      |
| 10477-30 | 78-8060-7785-1 | Fairlead /22                |
| 10477-31 | 78-8060-8335-4 | Washer - Triple, M8         |
| 10477-32 | 78-8134-2281-9 | Cover - Fap Folder Support  |
| 10477-33 | 78-8134-2282-7 | Cover                       |
| 10477-34 | 78-8134-2283-5 | Flap Folder Assy - Side     |
| 10477-35 | 78-8134-2284-3 | Block - Side Flap Folder    |
| 10477-36 | 78-8134-2285-0 | Side Flap Folder - R/H      |
| 10477-37 | 78-8134-2286-8 | Side Flap Folder - L/H      |
| 10477-38 | 78-8134-2287-6 | Plate - Side Flap Folder    |
| 10477-39 | 78-8134-2288-4 | Screw - Soc.Hd, M8x35       |
| 10477-40 | 78-8060-8298-4 | Screw - Soc.Hd, M6x12       |
| 10477-41 | 78-8060-8296-8 | Washer - Triple, M6         |
| 10477-42 | 78-8134-2289-2 | Screw - Soc.Hd, M8x25       |
| 10477-43 | 78-8134-2290-0 | Set Screw - M6x20           |
| 10477-44 | 78-8060-7862-8 | Knob Assy                   |
| 10477-45 | 78-8060-8304-0 | Washer - Flat, M12          |

